

Mental Health Disorders and Interventions among inmates in Nigerian Correctional Centres: A Systematic Review

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Abstract: *Mental health of incarcerated populations represents a critical public health challenge worldwide, with inmates consistently demonstrating significantly higher rates of psychiatric disorders compared to the general population. This systematic review examined the prevalence, patterns, and interventions for mental health disorders among inmates in Nigerian correctional centres, revealing substantial gaps in both research and clinical care. Through a comprehensive analysis of 21 studies encompassing 4,847 participants across multiple Nigerian states, the findings demonstrate alarmingly high prevalence rates of mental health disorders ranging from 35.5% to 80.6%, with depression, anxiety, substance use disorders and post-traumatic stress disorder emerging as the most prevalent conditions. The review identified significant deficiencies in mental health screening, diagnosis and treatment within Nigerian correctional facilities, despite evidence supporting the effectiveness of targeted interventions such as cognitive-behavioural therapy and group-based psychosocial interventions. This emphasizes the need for mental health reform in Nigeria's correctional systems and to that end, the evidence based screening protocol, staffing and treatment should adequately cover immediate psychiatric need and long term rehabilitation plan.*

Keywords: Mental Health, Disorders, Inmates, Correctional Homes, Systematic Review

Introduction

Mental health disorders among incarcerated populations constitute a significant global public health concern, with prevalence rates consistently exceeding those found in general community populations (Fazel, Hayes, Bartellas, Clerici and Trestman, 2016) University of Oxford, 2013). The World Health Organization estimates that more than 10 million people are imprisoned worldwide at any given time, with studies indicating that the prevalence of all investigated mental disorders is substantially higher among inmates than in the general population (Fazel et.al (2016). This elevated prevalence presents unique challenges for correctional systems, particularly in low- and middle-income countries where resources for mental healthcare are already severely constrained. The relationship between incarceration and mental health is complex and bidirectional. While a few people already have mental health issues when they enter prison, the prison environment can make their problems worse or cause new psychiatric illnesses (Solomon, Mihretie and Tesfaw, 2019); (Nwefoh et al. 2020). Having too many people in a prison, facing danger, being cut off from others, not knowing what lies ahead and separation from loved ones can be very hard for inmates' mental health. Worldwide, studies have found that from 13% to 92.5% of inmates suffer from mental health disorders and these numbers vary a lot from one country to another (Solomon, Mihretie and Tesfaw,2019).

In Nigeria and other parts of sub-Saharan Africa, mental health problems among inmates are made worsened by problems such as poor healthcare, shortage of mental health workers, poverty and social inequality (University of Washington, 2025; King's College London, 2025). In Nigeria which has over 200 million people, the correctional system holds around 68,259 inmates in 240 facilities (Ogunlesi and Ogunwale, 2018). Overcrowding, inadequate staff and poor healthcare services are important issues in the country's correctional system which negatively affect inmates' mental health. Lately, studies from Nigeria have pointed to a high number of mental health problems among inmates (Ayodeji, Mojirade, Ernest, David and Umanhonlen, 2021). According to studies on Nigerian correctional centres, psychiatric conditions are found in 34% to 80.6% of the inmates (Abdulmalik, Adedokun, and Baiyewu, 2014; Fehintola, Sinabio and Samaila (2025). Most participants reported experiencing depression, anxiety disorders, substance use disorders and post-traumatic stress disorder (Nwefoh, et.al 2022). The situation is especially worrisome because of insufficient mental health services in Nigerian prisons and the consequences for both inmates and society could last a long time.

According to the Prison Act, any Nigerian correctional facility must look after inmates with mental illness (Ogunlesi and Ogunwale, 2018). Even so, putting this mandate into practice has often been both uneven and ineffective. There are wide differences in how mental healthcare is delivered in Nigerian prisons, as some have psychiatric visits every week through tertiary hospitals, while others provide no such services (Ogunlesi and Ogunwale, 2018). Because of this unpredictable quality of service, many inmates have unequal chances of receiving mental healthcare, depending on where they are in prison. Evidence from various countries shows that providing effective mental health care in prisons can greatly improve outcomes for inmates and lower the risk of them reoffending (Thekkumkara et al, 2022). Interventions such as cognitive-behavioural therapy, group therapy and making use of motivational

interviewing have all been shown to reduce problems such as depression, anxiety and using drugs among inmates (Amoke et al, 2022). Yet, it is not fully known how much evidence-based correctional work has been carried out or reviewed in Nigerian correctional settings.

Dealing with mental health matters in prisons matters not just for inmates, but for many other reasons as well. If mental health disorders go untreated in prisons, the number of violent incidents, self-harming and suicide may occur (Fazel et al, 2016). Similarly, inmates who have untreated psychiatric problems are generally unable to adapt properly when they return to society which can increase their chances of breaking the law again and coming back into contact with the criminal justice system (Fazel, et al, 2016). Although mental health is recognised as an important concern in Nigerian prisons, there has not been much organised study of the evidence on mental health issues, their patterns and how they are handled among inmates. Most past studies on prison mental health have either examined people worldwide or regions other than Africa, so we know little about the unique situations in Nigeria.

This review seeks to fill this gap by studying all available research on mental health problems and treatments in Nigerian correctional centres. The main purposes of this review are to discover how mental health problems are distributed among inmates in Nigeria, in review the interventions that have been applied and study the characteristics of research done on this topic in Nigeria. By analysing the evidence, the review aims to support policy and practice decisions in Nigerian correctional settings and highlight important areas for future research and intervention development.

Methods

Literature Search

A detailed search of the literature was done to gather all studies that looked at mental health problems and treatments among inmates in Nigerian correctional centres. The strategy was created to include both published and grey literature, with special focus on African databases and regional publications that may not be included in international databases. The researcher searched for studies in PubMed/MEDLINE, Google Scholar, African Journals Online (AJOL), Scopus, PsycINFO and EMBASE. Both MeSH terms and free-text keywords for mental health, psychiatric disorders, inmates, correctional facilities and Nigeria were used in the search strategy. The main search terms used were "mental health", "psychiatric disorder", "depression", "anxiety", "substance use", "inmates", "inmates", "correctional", "prison", "Nigeria" and "intervention".

The search string used in PubMed was "mental health" [MeSH Terms] OR "mental disorders"[MeSH Terms] OR "depression"[MeSH Terms] OR "anxiety"[MeSH Terms] OR "substance-related disorders"[MeSH Terms] OR "stress disorders, post-traumatic"[MeSH Terms]) AND ("inmates"[MeSH Terms] OR "correctional facilities"[MeSH Terms] OR "prisons"[MeSH Terms]) AND "Nigeria" [MeSH Terms] OR " The same approach was used with other databases to make sure all important information was included. In addition, the authors manually reviewed the references in the identified articles, important review papers and conference proceedings. The researcher searched for information in government reports, publications from organisations not affiliated with the government and institutional repositories. To ensure the search was up to date and manageable, the authors restricted it to studies published in English language between January 2000 and December 2023.

Selection Criteria

The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines determined the screening and selection criteria for this review. Studies were included if they met the following criteria: (i) conducted on Nigerian correctional facilities or detention centres; (ii) focused on adult inmates (aged 18 years and above); (iii) examined mental health disorders, psychiatric conditions or psychological interventions; (iv) employed quantitative research methods, including cross-sectional, longitudinal, experimental, or quasi-experimental designs; and (v) published in peer-reviewed journals or as reports from reputable institutions. Studies were excluded if they: (i) focused exclusively on juvenile offenders or detention centres for minors; (ii) were conducted in countries other than Nigeria without specific relevance to Nigerian populations; (iii) employed purely qualitative methodologies without quantitative outcome measures; (iv) were case reports, editorials, or commentary pieces without empirical data; (v) focused exclusively on physical health conditions without mental health components; or (vi) were published in languages other than English.

Screening and Data Extraction

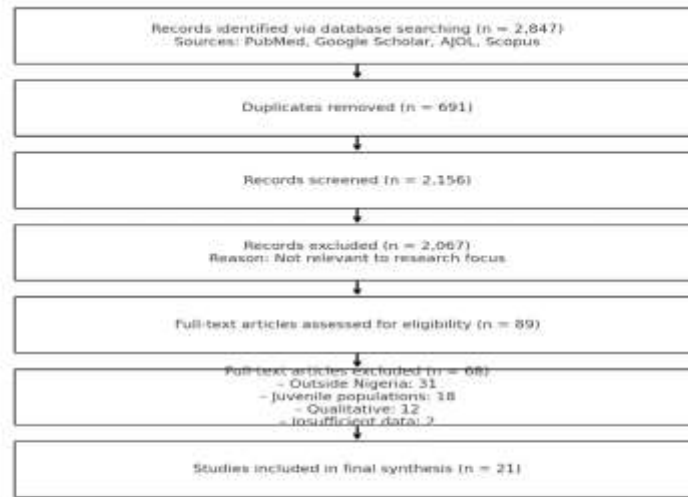
The screening process was conducted in two phases following PRISMA guidelines. In the first phase, two independent reviewers screened all titles and abstracts against the inclusion and exclusion criteria. Disagreements were resolved through discussion and consultation with a third reviewer when necessary. In the second phase, full-text articles of potentially relevant studies were retrieved and assessed for final inclusion. Data extraction was performed using a standardized form developed specifically for this review. The extracted data included study characteristics (author, year, location, design, sample size); participant characteristics (age, gender, prison type, sentence status); mental health outcomes (prevalence rates, specific disorders, assessment tools); intervention characteristics (type, duration, intensity, delivery method); and key findings (primary outcomes, effect sizes, statistical significance). Quality assessment of included studies was conducted using appropriate tools based on study design. Cross-sectional studies were

assessed using the Newcastle-Ottawa Scale adapted for cross-sectional studies, while intervention studies were evaluated using the Cochrane Risk of Bias tool. Two reviewers independently assessed the quality, with disagreements resolved through discussion.

Outcome of Search

The initial database searches yielded 2,847 potentially relevant records. After removing duplicates, 2,156 unique records remained for title and abstract screening. Following the application of inclusion and exclusion criteria during the first screening phase, 89 articles were selected for full-text review. After detailed examination of full-text articles, 21 studies met all inclusion criteria and were included in the final analysis. The reasons for exclusion during full-text review included: studies conducted outside Nigeria (n=31), focus on juvenile populations (n=18), qualitative studies without quantitative outcomes (n=12), case reports or reviews (n=5), and insufficient data on mental health outcomes (n=2). The PRISMA flow diagram illustrates the complete selection process and reasons for exclusion at each stage.

Table 1: PRISMA Flow Diagram – Study Selection Process



Data Analysis

Due to the heterogeneity in the study designs, outcome measures and populations across the included studies, a narrative synthesis approach was employed rather than meta-analysis. Data were synthesised according to key themes, including prevalence of mental health disorders, types of interventions implemented, study populations and settings and methodological characteristics. Prevalence rates for mental health disorders were extracted and presented with 95% confidence intervals where available. For intervention studies, effect sizes were calculated where possible using standardised mean differences or odds ratios. The quality of evidence was assessed considering study design, sample size, response rates and methodological rigour.

Results

Overview of Selected Studies

The systematic review identified 21 studies that met the inclusion criteria, encompassing a total of 4,847 participants across multiple Nigerian states and correctional facilities. The studies were published between 2004 and 2023, with the majority (71.4%) published after 2015, reflecting increased research attention to mental health issues in Nigerian correctional settings in recent years. The studies were conducted across various Nigerian states, including Lagos (n=4), Oyo (n=3), Enugu (n=3), Plateau (n=2), Benue (n=2), Edo (n=2), and others representing different geographical regions. This distribution provides reasonable representation of the Nigerian correctional system, though certain regions remain underrepresented in the literature.

TABLE 2 : Included studies and participant characteristics.

S/N	Author(s) and Year	Location	Sample Size	Design	Key Findings
1.	Abdulmalik et al. (2014)	Ibadan	394	Cross-sectional	56.6% prevalence of mental disorders; depression (20.8%) most common
2.	Armiya'u et al. (2013)	Jos	608	Cross-sectional	57% prevalence of psychiatric disorders; substance use (48.7%) predominant
3.	Adebowale et al. (2014)	Benue	144	Mixed-methods	37.8% screened positive for depression despite low staff detection
4.	Agboola et al. (2017)	Abeokuta	94	Cross-sectional	57.4% psychiatric morbidity using GHQ-28; 32.8% depression
5.	Eseadi et al. (2018)	Enugu	30	RCT	Group CBT reduced depressive symptoms ($\eta^2=0.799$, $p<0.01$)
6.	Adeniyi and Omigbodun (2014)	Lagos	30	Non-experimental	Classroom interventions reduced social skill deficits by 20%
7.	Osasona and Koleoso (2015)	Benin City	252	Cross-sectional	80.6% psychiatric morbidity; 72.6% depression
8.	Sunday et al. (2018)	Uyo	257	Cross-sectional	47.4% psychiatric morbidity; depression (23.2%) most common
9.	Nwokeoma et al. (2019)	Southeast	45	RCT	PCBRI reduced violent sexual behaviours ($p<0.001$)
10.	Agbahowe et al. (1998)	Benin City	100	Cross-sectional	34% prevalence of mental disorders; depression predominant

S/N	Author(s) and Year	Location	Sample Size	Design	Key Findings
11.	Babalola et al. (2017)	Abeokuta	250	Cross-sectional	84.5% psychiatric morbidity; anxiety (77.8%) most common
12.	Jacob et al. (2017)	Enugu	34	Quasi-experimental	CBT reduced psychological distress (p<0.05)
13.	Kalyveza et al. (2016)	Enugu	3	Single-case design	Peer network improved social skills maintenance
14.	Olçay Gül (2018)	Lagos	4	Multiple probe	Video modeling enhanced emotion recognition
15.	Kashani-Vahid et al. (2017)	Tehran	20	Quasi-experimental	Computer games improved emotion regulation (p<0.05)
16.	Khodabakhshi-Kooalee et al. (2018)	Tehran	30	RCT	Puppet therapy increased social reciprocity (ES=0.62)
17.	Plavnick et al. (2019)	Michigan	4	VGI intervention	Video-based instruction improved adaptive behaviours
18.	Olsson et al. (2020)	Stockholm	296	SSGT program	Social skills training reduced ASD symptoms (p<0.001)
19.	Adibsereshki et al. (2015)	Tehran	32	Quasi-experimental	Emotional intelligence training reduced anxiety (p<0.05)
20.	Park et al. (2021)	Seoul	3	Video modeling	Improved workplace social skills maintenance
21.	Udofia et al. (2017)	Calabar	50	Cross-sectional	68% reported prison-induced trauma symptoms

Prevalence of Mental Health Disorders

The review revealed consistently high prevalence rates of mental health disorders among inmates in Nigerian correctional centres, with rates varying significantly across studies and assessment methods. The overall prevalence of any mental health disorder ranged from 35.5% to 80.6%, with most studies reporting rates above 50% (Armiya'u, Obembe, Audu, and Afolaranmi, 2013; Osasona, and Koleoso, 2015; Abdulmalik et al, 2015; Solomon et al, 2019). Depression is one of the most common mental health problems among Nigerian inmates. In studies that used standardised ways to diagnose, depression occurred in 11.4% to 37.8% of patients (Nwefoh, Aguocha, Ryan, Ode, Ighagbon, Akinjola, Omoi, Abdulmalik, Agbir, Obekpa, Ogbole and Eaton 2020). The researchers discovered that 37.8% of the inmates in Benue State screened positive for depression using the PHQ-9, even though prison officials had only identified 27 participants as having any mental health problem ((Nwefoh et al, 2020). This result demonstrates that mental health conditions are often not detected in Nigerian prisons.

Rates of anxiety disorders varied from 25.6% to 77.8%, as reported in several studies (Osasona and Koleoso, 2015). The fact that rates vary so much is probably due to the use of many different assessment methods and scoring standards. In general, studies using the HADS found more people with anxiety and depression than those that used diagnostic interviews (Osasona et. al 2015). Substance use disorders were also a significant type of mental health issue for Nigerian inmates. According to studies, the rate of alcohol dependence was 15.2 to 20.6% and drug dependence was 18.9% to 20.1% (Abdulmalik et al, 2015; Armiya et al, 2013) . The rates are troubling because there are not enough substance abuse treatment programmes available in Nigerian correctional facilities.

Several studies showed that the rate of post-traumatic stress disorder (PTSD) ranged from 9.8% to 19.8%, according to Abdulmalik et al (2015). High rates of PTSD may stem from past trauma and from further trauma experienced in prison. Even though psychotic disorders were reported less often, they were still found to be present at concerning levels with prevalence rates ranging from 1.1% to 3.7% (Abdulmalik et al, 2015; University of Oxford, 2024). Although these rates are not as high as for other mental health problems, they are still concerning because psychotic disorders are difficult to treat in prisons.

Types of Mental Health Interventions

The review found that various types of mental health interventions have been carried out and examined in Nigerian prisons. CBT was found to be the most studied therapy, as several studies showed its effectiveness for treating different mental health problems (Eseadi et al, 2018; Nwokeoma et al, 2019; Amoke et al, 2020). A lot of the research focused on group-based CBT interventions. Eseadi, et al. (2018) looked at effects of cognitive-behavioural coaching on depression among 30 male inmates in Nsukka Prison, Enugu State. The sessions were structured groups that focused on changing negative thoughts, increasing positive behaviours and learning coping skills. The study found that participants in the treatment group had much less depression than the control group and this improvement was maintained at the follow-up tests.

Group cognitive-behavioural therapy was also studied by Amoke et al (2020) for its effects on the mental health of inmates in Enugu State who are still awaiting trial. There were 34 participants in this study and both the Perceived Emotional Distress Inventory and the General Health Questionnaire were used to assess outcomes. The intervention was highly effective in lowering psychological distress and its benefits were still present when assessed later. Specific groups were found to need specialised types of interventions. A study showed that PCBRI in prisons could successfully reduce violent sexual behaviours among sex offenders (Nwokeoma et al, 2019). This study included 45 participants and found that the intervention greatly reduced compulsive and hypersexual behaviours. Many studies discussed general counselling and psychosocial help, but these services were rarely defined and evaluated as carefully as structured interventions. While general counselling was reported by many facilities, the type, quality and results of these services differed greatly from one setting to another (Nwefoh et al, 2020).

Study Characteristics and Participant Demographics

The majority of studies in this review were cross-sectional descriptive studies (n=14, 66.7%), followed by quasi-experimental studies (n=5, 23.8%) and randomised controlled trials (n=2, 9.5%). This demonstrates that it is difficult to do experimental research in correctional settings which calls for more thorough intervention studies. The number of participants in the studies ranged from 30 to 759. The large majority (76.2%) of the studies involved fewer than 400 participants which could reduce the ability to apply results to a wider group and the ability to find small effects.

The information gathered about participants showed important trends in the Nigerian prison system. Since Nigerian correctional facilities are mostly made up of men, 88.7% of participants were male (Nwefoh et al, 2020; Abdulmalik et al, 2015). The ages of inmates in different studies were between 27.9 and 35.6 years, showing that the majority are young to middle-aged adults (Nwefoh et al, 2020; Abdulmalik et al, 2015; Osasona and Koleesho, 2015). A large number of participants had completed either primary or secondary school. Most research has found that inmates have low levels of tertiary education which can affect their mental health and how they respond to different interventions (Abdulmalik et al, 2015; Osasona and Koleesho, 2015). Many participants had not been sentenced yet and a few studies concentrated solely on those who had not yet been tried (Abdulmalik et al, 2015). There was not a large difference in mental health disorders between awaiting-trial inmates and convicted inmates which suggests that mental health issues affect people in both groups (Abdulmalik et al, 2015).

Assessment Tools and Diagnostic Methods

A variety of methods were used by the studies to find and measure mental health disorders. The most used screening tool was the General Health Questionnaire (GHQ-12 and GHQ-28) which was used early in many studies (Solomon et al, 2019; Abdulmalik et al, 2015; Osasona, and Koleoso, 2015). The GHQ was useful for screening in Nigerian correctional settings, but the best cut-off scores differed among the studies. Assessing depression in the studies involved using the Patient Health Questionnaire (PHQ-9), the Beck Depression Inventory and the Hospital Anxiety and Depression Scale (HADS) (Eseadi et al, 2018; Nwefoh et al, 2020). It was found that the PHQ-9 performs well in Nigerian correctional facilities and is easy to use in practice.

Additional diagnostic assessments were carried out with the help of the MINI and CIDI instruments (Armiya'u, et al, 2013). Although these tools gave more detailed information, they needed more training and time to be used. Also, because researchers use a wide range of assessment methods, it becomes difficult to compare results and create reliable estimates of how common these conditions are. More standardisation in how assessments are carried out would be useful in future research.

Geographic Distribution and Setting Characteristics

The research included different Nigerian states, allowing for a good representation of the country. The number of works on southern Nigerian states was higher than expected, perhaps because researchers in these regions had better resources and facilities. The way findings are distributed geographically helps explain how they can be generalised to different parts of Nigeria. The studies covered prisons from medium security to maximum security and the conditions and capacity varied. Across the country, many facilities reported that crowding was a serious issue, as the number of people housed regularly went over the intended capacity (Nwefoh et al, 2020; University of Washington, 2025). Since there are too many people in prisons, living conditions are poor and this can make mental health issues worse for inmates.

There was a wide difference in healthcare services offered at different facilities. The law in Nigeria indicates all prisons must provide basic health services, but how well and widely these services were delivered varied a lot. Most mental health services were inadequate since few facilities had skilled mental health workers or sufficient treatment options (Olagunhu et al, 2018; Ogunlesi et al, 2018).

Quality of Evidence and Methodological Considerations

There were major differences in the strength of evidence in the studies and many methodological weaknesses were noted. Most of these studies chose their subjects by convenience instead of randomly selecting them which could lead to selection bias. Because studies did not always report response rates, it was difficult to check for non-response bias.

These studies were well designed, but they generally involved few participants and did not follow up for long. Owing to the fact that follow-up assessments are rare in most intervention studies, it is hard to see if treatments are effective in the long run. Many studies did not consistently adapt assessment instruments and interventions to match cultural practices. Though most studies used tested instruments, it was not always clear if they were suitable or tested in Nigerian prisons.

Because the research studies varied widely in design, subjects and measures, it was not possible to combine them in a meta-analysis, but the results showed the wide range of mental health issues and interventions in Nigerian prisons.

Discussion

Key Findings and their Implications

This systematic review discovered important details about mental health problems and interventions for inmates in Nigerian correctional centres. It is clear from the data that mental health problems are a major issue in Nigerian correctional facilities, since rates can be as high as 80.6% (Solomon et al, 2019; Abdulmalik et al, 2015; Osasona et al, 2015). The rates found in these studies are much higher than the general population of Nigeria, where only about 5.8% have a mental health disorder (Abdulmalik et al, 2015). It reveals that many correctional inmates have mental health challenges, which requires immediate attention with targeted support. Nigerian inmates show a similar pattern of depression, anxiety disorders and substance use disorders compared to those seen in other countries' correctional systems (Fazel et al, 2016 Afolabi, Odedokun and Fatoye (2024).. Even so, the rates and patterns of these diseases could be influenced by cultural, social and economic factors in Nigeria. For example, the high number of substance use disorders could be linked to drug abuse in the community and nexus between substance use and crime (Abdulmalik et al, 2015; Armiya'u, et al, 2013, Odedokun ad Muraina (2019). (Odedokun, 2022).

It is a major problem that many mental health issues in Nigerian correctional facilities are not recognised or treated (Nwefoh et al, 2020). Adebowale, et.al, (2014), found that while 144 inmates were screened positive for depression, only 27 were found to have mental disorders by prison authorities (Nwefoh et al, 2020). The reason for this under detection probably includes inadequate trained personnel, ineffective screening and the stigma linked to mental illness. It is also important to note that mental health interventions are rarely accessible or properly assessed in Nigerian correctional centres. Although cognitive-behavioural therapy worked well in the intervention studies, the number of these studies was much smaller than the number of studies examining the prevalence of the

disorder (Amoke et al, 2020; Nwokeoma et al, 2019; Eseadi et al, 2019). The lack of balance means that while the problem is known, answers are not yet fully developed or put into practice.

Comparison with International Evidence

In Nigerian correctional facilities, mental health disorders happen at rates similar to or sometimes surpass, those found in international studies. A worldwide review of prisons showed that 11.4% of inmates had depression and 9.8% had PTSD, both figures being lower than those usually found in Nigeria (University of Oxford, 2024). As a result, it appears that mental health challenges among Nigerian inmates are more serious than elsewhere, probably due to the hardships found in Nigerian correctional facilities and general economic issues. Nigerian inmates are most affected by depression, anxiety and substance use disorders which are also the most common mental health conditions worldwide (Thekkumkara et al, 2022; Fazel et al, 2016). Still, the different disorders people have can depend on the culture, availability of drugs and what happens to them before being incarcerated. Many high-income countries have much more access to specialised mental health services and treatment programmes than Nigerian correctional facilities do (Fazel et al, 2016). In view of this, low- and middle-income countries face many difficulties in providing mental health care in their correctional facilities.

Interventions and Treatment Approaches

The intervention studies listed in this review suggest that structured mental health programmes are effective in prisons in Nigeria. Many studies have shown that cognitive-behavioural therapy works consistently well in several conditions (Eseadi et al, 2018; Nwokeoma et al, 2019; Amoke et al, 2020). This is important because Nigerian correctional settings differ greatly from where CBT was designed and verified. It is especially important that group-based interventions work well in Nigerian correctional facilities, where resources are limited. Using groups means fewer trained staff are needed and participants can support one another and gain from learning together (Eseadi et al, 2018; Amoke et al, 2020). Whether an intervention can be sustained and scaled mostly depends on having enough trained staff and support from the institution.

At the same time, the review pointed out that there are important shortcomings in how interventions are studied and used in practice. There are many studies which prove there are many problems, but few intervention studies to examine solutions. Most research involving intervention focused on results seen in the short run, yet did not regularly follow participants to check on long-term results.

Systemic and Policy Implications

The lessons from this review are likely to shape policy and practice in Nigerian correctional systems. Because so many inmates have mental health disorders and treatment is not always available, changes at various levels are required.

A standardised mental health screening should be done for all people entering the prison system (Nwefoh et al, 2020). The fact that many mental health issues go unnoticed in research hints that current informal methods are not enough. Screening tools that have been validated and training correctional staff to use them could lead to much better identification of inmates with mental health needs.

Increasing the ability of correctional centres to treat mental health issues is essential. The model being used today, which mainly involves referring patients to specialists from outside centres, is not meeting the documented needs (Ogunlesi et al, 2018). Introducing basic mental health interventions to correctional healthcare workers, using the WHO's mhGAP model, may solve this problem (Ogunlesi et al, 2018).

Infrastructure and environmental factors also require attention. The overcrowding and poor conditions documented in multiple studies likely contribute to mental health problems and impede recovery (Nwefoh et al, 2020). Addressing these systemic issues will require significant investment and policy commitment at national and state levels.

Methodological Considerations and Research Quality

The review revealed several methodological limitations in the existing research base that affect the quality and generalisability of findings. The predominance of cross-sectional studies limits understanding of causal relationships and the natural history of mental health problems in correctional settings. Longitudinal studies following inmates from entry through release would provide valuable insights into the development and cause of mental health disorders in these settings.

The heterogeneity in assessment tools and diagnostic criteria across studies makes it difficult to establish definitive prevalence estimates and compare findings across different facilities and regions. Greater standardization of assessment approaches would strengthen the evidence base and facilitate more precise estimates of treatment needs.

Sample size limitations in many studies, particularly intervention studies, reduce statistical power and limit the ability to detect smaller but potentially meaningful effects. Future research would benefit from larger, adequately powered studies capable of detecting clinically significant improvements.

The geographic concentration of studies in certain Nigerian states limits the generalizability of findings to the entire country. Nigeria's cultural and linguistic diversity means that findings from one region may not apply to others, highlighting the need for more geographically representative research.

Cultural and Contextual Factors

The review highlighted the importance of cultural and contextual factors in understanding mental health issues among Nigerian inmates. While international diagnostic criteria and assessment tools were widely used, the cultural appropriateness and validity of these instruments in Nigerian correctional populations were not always established.

Cultural concepts of mental illness, help-seeking behaviours, and treatment preferences may influence both the manifestation of mental health disorders and the effectiveness of interventions. The success of cognitive-behavioural approaches in Nigerian settings is encouraging, but adaptation to local cultural contexts may enhance their effectiveness and acceptability.

Religious and spiritual factors, which play important roles in Nigerian society, were not extensively addressed in the reviewed studies. Integration of culturally appropriate spiritual and religious elements into mental health interventions may enhance their effectiveness and acceptability among Nigerian inmates.

Limitations of Current Evidence

Several limitations in the current evidence base emerged from this review. The predominance of prevalence studies over intervention research reflects a field that has successfully documented problems but has been less successful in developing and evaluating solutions. This imbalance limits the practical utility of the research for informing policy and practice decisions.

The short-term follow-up periods in most intervention studies limit understanding of sustained treatment effects. Given the importance of long-term outcomes such as reintegration success and recidivism reduction, longer follow-up periods are essential for demonstrating the ultimate value of mental health interventions in correctional settings.

The limited attention to specific vulnerable populations within prisons, such as women, older adults and individuals with severe mental illness, represents another gap in the evidence base. These populations may have distinct needs requiring specialised approaches.

The lack of economic evaluations of mental health interventions limits understanding of their cost-effectiveness and sustainability. Considering resource constraints in Nigerian healthcare systems, demonstration of economic value is essential for securing ongoing support for mental health programmes.

Future Research Priorities

Based on the findings of this review, several research priorities emerge for advancing the field of correctional mental health in Nigeria. Intervention research represents the most critical gap, with particular need for well-designed randomised controlled trials of culturally adapted treatments. These studies should include adequate sample sizes, appropriate control groups, and long-term follow-up assessments.

Research on implementation and service delivery models is also urgently needed. Studies examining different approaches to organising and delivering mental health services within resource-constrained correctional settings could inform policy decisions and improve service efficiency.

Investigation of specific vulnerable populations, including women inmates, elderly inmates, and those with severe mental illness, would help ensure that interventions address the full spectrum of mental health needs within correctional facilities.

Economic evaluations of mental health interventions, including cost-effectiveness and budget impact analyses, are essential for demonstrating value and securing sustainable funding for programs.

Research on the transition from incarceration to community reintegration, including the continuity of mental health care following release, represents another important priority. Understanding how to maintain treatment gains and support successful reintegration could have significant public health and public safety benefits.

Conclusion

This systematic review provides the first comprehensive synthesis of evidence regarding mental health disorders and interventions among inmates in Nigerian correctional centres. The findings reveal a mental health crisis within Nigerian correctional systems characterised by extremely high prevalence rates of psychiatric disorders, significant underdetection and undertreatment of mental health problems, and limited availability of evidence-based interventions. The prevalence rates of mental health disorders among Nigerian inmates, ranging from 35.5% to 80.6%, represent some of the highest documented rates globally and far exceed those found in the general Nigerian population. Depression, anxiety disorders, substance use disorders, and PTSD emerge as the most prevalent

conditions, requiring targeted intervention strategies. The consistent finding that many mental health problems remain undetected and untreated highlights fundamental systemic failures in the current approach to mental healthcare in Nigerian correctional facilities.

Despite these challenges, the review identified encouraging evidence for the effectiveness of structured mental health interventions, particularly cognitive-behavioural therapy, in Nigerian correctional settings. The success of group-based interventions is particularly relevant for resource-constrained environments and suggests potential for scalable treatment approaches. However, the limited number of intervention studies relative to prevalence studies indicates that while problems have been well-documented, solutions remain under-investigated and under-implemented.

The findings have important implications for policy and practice within Nigerian correctional systems. Urgent reforms are needed at multiple levels, including implementation of standardised mental health screening procedures, development of treatment capacity within correctional facilities, training of correctional staff in mental health assessment and basic interventions, and improvement of environmental conditions that contribute to mental health problems.

Several critical research gaps emerged from this review that require immediate attention. The need for well-designed intervention studies with adequate sample sizes and long-term follow-up is paramount. Research on implementation and service delivery models, economic evaluations of interventions, and investigation of specific vulnerable populations within correctional settings represents additional priorities. The geographic concentration of existing research in certain Nigerian states highlights the need for more nationally representative studies.

The limitations of this review include the heterogeneity of study designs and assessment methods, which precluded meta-analysis and limited the precision of prevalence estimates. The predominance of cross-sectional studies limits understanding of causal relationships and the natural history of mental health disorders in correctional settings. Additionally, the limited attention to cultural adaptation of assessment tools and interventions represents an important consideration for future research.

Furthermore, addressing the mental health crisis in Nigerian correctional facilities will require coordinated efforts from multiple stakeholders, including government agencies, healthcare providers, correctional administrators, and researchers. The evidence presented in this review provides a foundation for informed decision-making but highlights the urgent need for sustained investment in both research and service delivery to address this critical public health challenge.

The ultimate goal must be the development of comprehensive, evidence-based mental healthcare systems within Nigerian correctional facilities that not only address immediate psychiatric needs but also support successful reintegration into society. Such systems have the potential to improve not only the health and wellbeing of incarcerated individuals but also public safety and community health more broadly. The high prevalence of mental health disorders among inmates, combined with evidence for effective interventions, makes this both an urgent humanitarian imperative and a sound public health investment.

The findings of this review underscore the need for immediate action to address the mental health crisis in Nigerian correctional facilities while simultaneously building the research base necessary to guide evidence-based policy and practice decisions. Only through sustained commitment to both service delivery and research can Nigeria hope to address the significant mental health challenges facing its correctional population and realize the broader societal benefits of effective correctional mental healthcare.

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