

Mental Health Disorders, Staff Preparedness, and Resource Adequacy in Nigerian Correctional Facilities: A Mixed Methods Study in Kaduna State

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ABSTRACT

Correctional populations experience significantly higher rates of mental health disorders than the general population, yet empirical evidence from Nigerian correctional systems remains limited. This study examined the prevalence and severity of mental health disorders among inmates in Kaduna State correctional facilities, assessed staff knowledge and training related to mental health, and explored institutional capacity for mental healthcare delivery. A convergent parallel mixed methods design was employed across two correctional facilities in Kaduna State. Quantitative data were collected from 200 inmates using the Patient Health Questionnaire (PHQ-9) and the General Health Questionnaire (GHQ-28), and from 43 correctional staff using a Mental Health Knowledge Questionnaire. Qualitative data were obtained through semi structured interviews and observational checklists. Quantitative data were analysed using descriptive and inferential statistics, while qualitative data underwent thematic analysis. Results show an extremely high prevalence of psychological distress among inmates, with 98 percent meeting GHQ caseness criteria and 57.5 percent experiencing moderate to severe depressive symptoms. The mean PHQ-9 score was 10.19 (SD = 4.56) and the mean GHQ-28 score was 23.76 (SD = 8.80). Only 55.6 percent of inmates reported receiving mental health support, while 33.3 percent of inmates with severe depression reported no form of support. Among staff, 76.7 percent reported confidence in identifying mental illness, yet 58.1 percent rated available mental health resources as fair or poor. Qualitative findings revealed limited mental health infrastructure, absence of specialised professionals, reliance on externally sourced medications, and significant institutional funding constraints. The findings indicate a substantial gap between the mental health needs of inmates and the institutional capacity to deliver adequate care within Kaduna State correctional facilities.

Keywords: Prison Mental Health, Correctional Facilities, Depression among Inmates, Mental Health Services, PHQ-9, GHQ-28, Nigeria

INTRODUCTION

Globally, correctional facilities face significant challenges in addressing mental health and behavioral disorders among incarcerated populations. Research indicates that individuals in prisons and jails are disproportionately affected by mental illnesses, with prevalence rates up to seven times higher than in the general population (Gómez-Figueroa & Camino-Proano, 2022). The World Health Organization (n.d) highlights a projected global shortfall of 11 million health workers by 2030, with low- and middle-income countries bearing the brunt of this crisis, further limiting the capacity of correctional systems to provide adequate care.

Mental health disorders are highly prevalent among incarcerated populations, with studies showing that up to 61% of inmates in short-term correctional facilities have received at least one mental disorder diagnosis (Lafortune, 2010). In state prisons, nearly half of inmates have been diagnosed with a mental illness, with 29% having a serious mental illness (Al-Rousan et al., 2017). Among adolescents in juvenile detention, common disorders include conduct disorder (59-62%), ADHD (17%), and depression (10-26%), with higher rates of depression and PTSD in females (Beaudry et al., 2020). The prison environment can exacerbate mental health

issues, highlighting the need for improved mental health programs in correctional settings (Gómez-Figueroa & Camino-Proano, 2022).

Mental health issues are prevalent among incarcerated populations in Nigeria, with studies revealing high rates of psychiatric disorders. In a review of mental health services in Nigerian prisons, schizophrenia and mood disorders were found to be common diagnoses, with about half of inmates using psychoactive substances (Olagunju et al., 2018). Factors associated with psychiatric morbidity include being single, employed, and lacking prior psychiatric treatment (Bioku et al., 2021). The majority of inmates with mental health issues have no prior contact with psychiatric treatment (Bioku et al., 2021). A study of adolescents in a correctional facility reported an 82.5% prevalence of psychiatric disorders, with disruptive behavior disorders being the most frequent (Kuranga & Yussuf, 2021). Among awaiting trial inmates, the prevalence of mental illness was 56.6%, with depression, alcohol dependence, and substance dependence being common (Abdulmalik et al., 2014). Despite the high prevalence of mental health issues, correctional psychiatry services in Nigeria are poorly structured and underfunded (Ogunlesi & Ogunwale, 2018). It is important to note that there is a lack of mental health screening, intervention frameworks, and adequately trained staff in correctional institutions (Atilola et al., 2017).

Nigeria's correctional system reflects broader regional challenges, with mental health care in prisons characterized by systemic neglect and resource scarcity. The country's prison population, estimated at 68,259 inmates, faces overcrowding rates exceeding 150%, with facilities like Ibara Prison in Ogun State reporting pervasive use of inadequate sleeping materials and noisy environments that exacerbate sleep disorders and psychological distress (Fakorede, et al., 2023). A 2023 study of male inmates in Ibara found that 47.3% experienced poor sleep quality, linked to environmental stressors and limited family support, while 27% reported insufficient access to mental health services (Fakorede, et al., 2023). These conditions are compounded by a critical shortage of trained professionals: Nigeria's prison service employs only one psychiatrist, with clinical psychologists and psychiatric nurses similarly scarce (Ogunlesi & Ogunwale, 2018).

The Prison Act of 2004 nominally guarantees inmates' right to health but fails to allocate sufficient funds for medications or hospital transfers, leaving severe cases untreated or restrained in isolation (Ogunlesi & Ogunwale, 2018). Despite constitutional provisions and commitments to international treaties like the African Charter on Human and Peoples' Rights, implementation remains inconsistent, with mental health care often deprioritized in federal budgets (Ogunlesi & Ogunwale, 2018).

The lack of mental health specialists in Nigeria exacerbates the problem even more. With an estimated population of more than 200 million, Nigeria has about 350 psychiatrists, which means that the country's psychiatrist-to-population ratio is much lower than what the WHO recommends (Vanguard, 2020). Because there are so few mental health experts available in the penitentiary system, this shortage is much more severe there. Many prisoners with mental health disorders do not receive the care they require due to a shortage of competent staff, which exacerbates their diseases and occasionally results in avoidable deaths. According to reports, there are incidences of mentally ill prisoners being neglected, which can worsen their mental health and, in the worst situations, result in their death from a lack of care and assistance (Sahara Reporters, 2024).

The difficulties in Kaduna State are representative of the larger national problems. Inmates still have limited access to mental health services, even with the Federal Neuro-Psychiatric Hospital in Kaduna. Inadequate infrastructure, overcrowding, and a shortage of qualified medical staff are all features of the state's correctional facilities that lead to the poor mental health outcomes of prisoners. The situation is made worse by the lack of routine mental health screenings and the insufficient training provided to correctional staff on how to recognize and handle mental health concerns. Additionally, the punitive culture that is prevalent in Nigerian prisons frequently leads to the use of isolation and physical restraints on inmates with mental health conditions, practices that are not only inhumane but also detrimental to the mental well-being of the affected individuals (Abeku, 2025).

One cannot overestimate the impact of inadequate medical training and support within correctional facilities; correctional staff frequently lacks the necessary training to identify signs of mental illness, resulting in

mismanagement and, in some cases, abuse of inmates with mental health conditions. The correctional system's rehabilitative objectives are undermined by this lack of training and assistance, which feeds a cycle of neglect and decline in the mental health of prisoners.

Research Objectives

Highlighted below are the research objectives that will guide this study;

- i. To determine the prevalence and severity of mental health disorders among inmates in Kaduna State correctional facilities.
- ii. To assess the level of mental health training and knowledge among correctional facility staff.
- iii. To explore how inmates and staff perceive and experience mental healthcare and training support within the prison setting.

EMPIRICAL REVIEW

Emilian, Al-Juffali, and Fazel (2025) performed an extensive systematic review and meta-analysis to ascertain the global prevalence of severe mental illness within prison populations across 43 countries. The study looked at data from more than 30 epidemiological studies that included more than 20,000 prisoners from jails and prisons around the world. The researchers utilised meta-analytic statistical methods to consolidate prevalence estimates of significant psychiatric disorders among inmates. The results showed that 3.7% of prisoners had psychotic disorders like schizophrenia and about 11.4% had major depressive disorder. These rates were much higher than those seen in the general population. The study also found that more than half of the people in jail had substance use disorders, which shows that mental illness and substance abuse often go hand in hand. The researchers also said that mental disorders were especially common among young male prisoners and people who had been through trauma or had problems with drugs or alcohol in the past. The study found that the number of people with mental health problems in prisons is much higher than in the general population. It also stressed that prisons have become de facto mental health care providers. The authors said that correctional systems should set up organised mental health screening and treatment services. In 2024, Favril and others did an umbrella review of 17 meta-analyses that looked at how common mental and physical health problems are among prisoners around the world. The study amalgamated results from several extensive studies encompassing hundreds of thousands of prisoners from various countries. The authors used systematic review methods to look at how common mental health disorders are among prisoners. The results indicated that roughly 23% of prisoners were diagnosed with major depressive disorder, and about 4% were diagnosed with psychotic disorders, both of which were markedly elevated compared to the general population. The study also found that about 26% of people in prison had anxiety disorders and almost two-thirds of prisoners had a history of substance use disorders. This shows how complicated the mental health needs are in prisons. The researchers discovered that numerous inmates possessed pre-existing psychiatric conditions prior to incarceration; however, these conditions frequently deteriorated during imprisonment due to overcrowding, restricted access to psychiatric services, social isolation, and exposure to stressful prison environments. The authors came to the conclusion that the prison population has a disproportionately high number of mental health problems, with rates that are at least two to five times higher than those in the general community. The study suggested that prison administrations incorporate mental health services into correctional health systems to meet the increasing psychiatric requirements of inmates. Bukten et al. (2024) performed a multinational register-based study investigating the prevalence and comorbidity of mental health and substance use disorders among prisoners in Scandinavian countries from 2010 to 2019. The research examined administrative health and correctional data pertaining to over 12,000 inmates in Norway, Sweden, and Denmark. The goal was to find out how common mental illnesses are among prisoners and how common substance abuse problems are at the same time. The results showed that about 41% of prisoners had at least one diagnosed mental health disorder and about 55% had substance use disorders. The research also identified a notable degree of comorbidity, revealing that more than 30% of inmates were concurrently afflicted with both mental illness and substance abuse. Depression and anxiety disorders were among the most common psychiatric conditions identified, affecting approximately 20% and 18% of inmates respectively, while personality disorders were present in nearly 15% of the prison population. Furthermore, the study reported that inmates with co-occurring disorders were more likely to experience severe psychological

distress and required more specialized psychiatric care. The researchers concluded that mental health disorders among prisoners are not only highly prevalent but also complex, often involving multiple overlapping psychiatric conditions. The study recommended that correctional health systems implement integrated treatment programs that simultaneously address mental illness and substance abuse.

Dereje, et al., (2025) conducted an empirical study examining the prevalence of depression and associated factors among prisoners in correctional facilities in Eastern Ethiopia. The study adopted a cross-sectional survey design involving 420 inmates selected through systematic random sampling. Data were collected using the Patient Health Questionnaire-9 (PHQ-9), a standardized psychological screening tool used to assess depressive symptoms. The results of the study revealed that 55.9% of the inmates experienced symptoms of depression, indicating a very high prevalence of mental health problems within the prison population. Among those diagnosed with depression, approximately 21% had severe depressive symptoms, while 34% experienced moderate levels of depression. The study further identified several factors significantly associated with depression among prisoners, including long prison sentences, lack of family visits, previous history of mental illness, overcrowded prison conditions, and limited access to mental health services. Inmates who had been incarcerated for more than five years were found to be 2.3 times more likely to develop depressive symptoms compared to those serving shorter sentences. The authors concluded that depression is highly prevalent among inmates in correctional institutions, particularly in developing countries where prison conditions and mental health services are often inadequate. The study recommended the introduction of mental health screening programs and psychological support services within correctional facilities.

Alwi and Ayubi (2024) conducted a study examining the determinants of mental health literacy among correctional officers in correctional institutions. The objective of the study was to assess the level of knowledge and training related to mental health issues among prison staff and identify factors influencing their level of mental health literacy. The researchers adopted a cross-sectional survey design involving 150 correctional officers selected through stratified random sampling. Data were collected using the Mental Health Knowledge Schedule (MAKS) questionnaire, and statistical analysis was performed using descriptive statistics and logistic regression analysis. The results revealed that only 38.7% of correctional officers demonstrated a high level of mental health knowledge, while 41.3% showed moderate knowledge and 20.0% had low knowledge of mental health conditions and management strategies. Furthermore, the regression analysis indicated that correctional officers who had received formal mental health training were 2.8 times more likely to demonstrate high mental health literacy ($OR = 2.83, p < 0.05$) compared to those who had not received such training. The study also found that officers with more than five years of work experience scored significantly higher in mental health knowledge tests (mean score = 24.6 ± 4.1) compared to those with less experience (mean score = 19.3 ± 3.7). The authors concluded that mental health literacy among correctional staff remains relatively inadequate and emphasized the need for structured training programs to improve correctional officers' ability to identify and manage inmates with mental health disorders.

Valera, et al., (2024) conducted a pilot experimental study evaluating the effectiveness of Mental Health First Aid (MHFA) training among correctional officers. The study aimed to determine whether structured training programs could improve correctional officers' knowledge of mental health disorders and their ability to respond to inmates experiencing psychological crises. The researchers used a pre-test and post-test experimental design involving 52 correctional officers from a state correctional facility. Participants completed standardized mental health knowledge assessments before and after receiving the training intervention. The findings indicated that the average knowledge score of participants increased significantly from 61.2% before training to 82.5% after training, representing a 21.3% improvement in mental health knowledge levels. Statistical analysis using the Wilcoxon signed-rank test revealed that the increase in knowledge scores was statistically significant ($Z = -4.87, p < 0.001$). Additionally, 76% of participants reported improved confidence in identifying symptoms of mental illness, while 68% reported improved confidence in responding to inmates experiencing mental health crises after the training. The study concluded that targeted mental health training programs significantly enhance correctional officers' knowledge and preparedness in managing inmates with mental health conditions. Shields, Ricciardelli, and Jamshidi (2024) conducted a study assessing mental health knowledge, stigma, and service-use intentions among correctional workers. The study used a quantitative survey design involving 1,315 correctional workers, including correctional officers, healthcare staff, and administrative personnel across

several correctional facilities. Data were analyzed using descriptive statistics and multivariate regression analysis to determine the relationship between training, knowledge, and attitudes toward mental health issues. The findings revealed that only 46% of correctional workers had received formal mental health training, while 54% reported having no structured training related to mental health management in correctional facilities. The study further found that workers who had received mental health training scored significantly higher on mental health knowledge assessments (mean score = 72.4%) compared to those without training (mean score = 58.1%), with the difference being statistically significant ($t = 7.94$, $p < 0.001$). In addition, the study showed that correctional staff with higher mental health knowledge demonstrated 35% lower levels of stigmatizing attitudes toward inmates with mental illness. The authors concluded that improving mental health training among correctional staff can significantly enhance knowledge levels and reduce stigmatization of inmates experiencing psychological disorders.

Flumo, et al., (2024) conducted a study examining the impact of Mental Health First Aid training programs on the mental health awareness and competence of correctional officers. The study employed a quasi-experimental design involving 87 correctional officers who participated in a structured mental health training program. Data were collected using pre-training and post-training surveys measuring mental health knowledge, confidence in responding to mental health crises, and attitudes toward inmates with mental illness. Statistical analysis using paired sample t-tests revealed that participants' average mental health knowledge scores increased from 56.4% before the training to 79.8% after the training, representing a 23.4% improvement in knowledge levels. Additionally, 71% of the participants reported improved ability to identify symptoms of depression, anxiety, and psychosis among inmates, while 65% reported increased confidence in referring inmates to mental health professionals. The study also found that 83% of participants indicated that mental health training should be incorporated as a mandatory component of correctional staff professional development programs. The authors concluded that structured mental health training programs significantly enhance correctional officers' knowledge and readiness to respond to mental health issues within correctional facilities.

Coulling, Johnston, and Ricciardelli (2024) conducted a qualitative study exploring barriers to mental health support and services among correctional officers working within prison systems. The objective of the study was to examine how correctional staff perceive and experience mental health support services within correctional institutions. The researchers employed a qualitative research design using semi-structured interviews with 44 correctional officers working across multiple correctional facilities. Data were analyzed using thematic analysis to identify recurring themes related to mental healthcare accessibility and training support within prisons. The findings revealed that approximately 68% of the officers reported limited access to structured mental health support services, while 72% indicated that their institutions lacked adequate training programs to help staff identify or manage inmates with mental health problems. Additionally, 61% of participants reported feeling inadequately prepared to manage inmates experiencing severe psychological distress, particularly in situations involving self-harm or suicide attempts. The study also found that over 70% of officers believed that stigma surrounding mental health issues discouraged both staff and inmates from seeking professional help. Participants emphasized that institutional culture often promoted emotional resilience and toughness among correctional staff, which discouraged open discussion about mental health challenges. The authors concluded that insufficient mental health training and limited institutional support negatively influence correctional officers' ability to effectively manage inmates with mental health problems. The study recommended the implementation of structured mental health training programs and improved psychological support systems within correctional institutions.

Sundt, Reiter, and Williams (2024) conducted a study examining the perceptions of correctional staff regarding mental health care provision within correctional facilities. The study utilized a cross-sectional survey design involving 360 correctional officers and healthcare staff working in a large county jail system in the United States. Data were collected using structured questionnaires that measured staff perceptions of mental health services available to inmates and the level of institutional support provided to correctional personnel. Statistical analysis was conducted using descriptive statistics and regression analysis. The results showed that 64% of correctional staff believed that mental health services for inmates were inadequate, while 58% reported that they had received little or no training on how to respond to inmates experiencing mental health crises. Furthermore, the study revealed that only 37% of staff reported feeling confident in their ability to identify symptoms of serious mental illness among inmates. Regression analysis indicated that staff who had received specialized mental health

training were 2.1 times more likely to report confidence in responding to inmates with mental health disorders ($p < 0.05$) compared to staff without training. Additionally, 71% of respondents reported that increased collaboration between correctional officers and mental health professionals would improve the effectiveness of mental healthcare delivery in prisons. The authors concluded that correctional staff perceptions of mental health care in prisons are largely shaped by the availability of training, institutional support, and collaboration between healthcare professionals and correctional personnel.

Woodall (2024) conducted a systematic review examining strategies for promoting mental health and well-being among prison staff and improving institutional mental health support systems within correctional facilities. The study analyzed 27 empirical studies involving correctional staff across different prison systems in Europe and North America. The objective was to understand how prison staff perceive mental health support programs and identify institutional factors affecting their effectiveness. The review found that over 60% of correctional staff across the reviewed studies reported experiencing high levels of occupational stress and psychological strain due to their work environment. Furthermore, approximately 55% of correctional staff reported that their institutions provided insufficient mental health training related to managing inmates with psychiatric conditions. The study also found that prison staff working in institutions with structured mental health support programs reported significantly higher levels of job satisfaction and psychological well-being, with satisfaction scores averaging 74% compared to 48% among staff working in institutions without such programs. Additionally, the review indicated that correctional officers who received mental health training were 30% more likely to demonstrate positive attitudes toward inmates with mental illness. The authors concluded that mental health training programs and institutional support mechanisms significantly influence correctional staff perceptions of mental health care within prisons and recommended the expansion of mental health training initiatives for prison personnel.

Kim, Caspers, and Jahic (2024) conducted a study investigating how correctional officers and inmates perceive the effectiveness of mental healthcare services within prison environments. The researchers adopted a mixed-method research design combining surveys and focus group discussions involving 120 inmates and 75 correctional officers in a women's correctional facility. Quantitative data were analyzed using descriptive statistics and correlation analysis, while qualitative data were analyzed using thematic analysis. The findings showed that approximately 62% of inmates reported dissatisfaction with the availability of mental health services in the prison, citing long waiting times and limited access to qualified mental health professionals. Similarly, 59% of correctional officers reported that existing mental health services within the facility were insufficient to meet the psychological needs of inmates. The study also revealed that only 42% of inmates reported having access to counseling services when experiencing emotional distress, while more than 70% of inmates indicated that improved mental health programs would significantly enhance their psychological well-being during incarceration. Correlation analysis further indicated a moderate positive relationship ($r = 0.46$, $p < 0.01$) between the availability of mental health services and inmates' overall perception of prison well-being. The authors concluded that both inmates and correctional staff perceive significant gaps in the delivery of mental healthcare within prison environments and recommended improvements in mental health infrastructure, staff training, and collaboration between correctional officers and healthcare professionals.

METHODS/DESIGN

This study adopted a convergent parallel mixed methods design. Quantitative and qualitative data were collected during the same phase of the study and analysed separately before integration during interpretation. The quantitative component assessed the prevalence and severity of mental health disorders among inmates and evaluated staff knowledge and perceptions of mental health services. The qualitative component explored institutional practices, staff experiences, and structural challenges affecting mental health service delivery within the correctional facility.

Study Setting

The study was conducted in Kaduna Correctional Facility, located in Kaduna State, Nigeria. The facility houses inmates with different legal statuses and security classifications. Health services within the facility include basic

medical care; mental health services remain limited and largely dependent on external referrals and informal support mechanisms.

Study Population and Sampling

The study involved two participant groups: inmates and correctional staff.

A total of 200 inmates participated in the quantitative component of the study. Participants were selected using a purposive sampling approach based on eligibility criteria which included willingness to participate, ability to provide informed consent, and availability during the data collection period.

In addition, 43 correctional staff members participated in the staff survey assessing knowledge of mental health conditions, confidence in responding to psychological crises, and perceptions of institutional resource adequacy. For the qualitative component, selected staff members participated in semi structured interviews to provide deeper insights into institutional practices, operational challenges, and mental health service delivery within the correctional facility.

Data Collection Instruments

Three main instruments were used for data collection.

Patient Health Questionnaire (PHQ-9)

The PHQ-9 is a widely used screening instrument for assessing depressive symptoms. The scale contains nine items which measure the frequency of depressive symptoms over the previous two weeks. Each item is scored on a four-point scale ranging from 0 to 3. Total scores range from 0 to 27, with higher scores indicating greater severity of depression.

General Health Questionnaire (GHQ-28)

The GHQ-28 was used to assess general psychological distress among inmates. The instrument includes twenty-eight items covering four domains: somatic symptoms, anxiety and insomnia, social dysfunction, and severe depression. Responses are scored using a Likert scale, and higher scores indicate greater psychological distress.

Mental Health Knowledge Questionnaire

Correctional staff completed a structured questionnaire designed to assess knowledge of mental health conditions, confidence in identifying psychological symptoms among inmates, and perceptions of available mental health resources within the correctional facility. For the qualitative component, semi structured interview guides were used to explore staff experiences, coping strategies used within the facility, and perceived barriers to mental health service delivery.

Data Collection Procedure

Data collection took place within the correctional facility following administrative approval from the Nigerian Correctional Service authorities. Participants received information about the purpose of the study and their rights as research participants. Questionnaires were administered directly to inmates and staff who agreed to participate. Interviews with selected staff members were conducted in designated administrative areas within the facility to ensure privacy and confidentiality.

Data Analysis

Quantitative data were analysed using the Statistical Package for Social Sciences (SPSS). Descriptive statistics

such as frequencies, percentages, means, and standard deviations were used to summarise participant characteristics and mental health outcomes. Depression severity was categorised using established PHQ-9 scoring guidelines, while GHQ-28 scores were used to determine the prevalence of psychological distress among inmates.

Qualitative data obtained from interviews were analysed using thematic analysis. Interview transcripts were reviewed repeatedly to identify recurring patterns, themes, and institutional challenges related to mental health service delivery. Findings from the qualitative and quantitative analyses were integrated during interpretation to provide a comprehensive understanding of mental health conditions and service capacity within the correctional facility.

Ethical Consideration

Ethical approval for this study was obtained from the Research Ethics Committee of Ahmadu Bello University, Zaria, Nigeria. Permission to conduct the study within the Kaduna Correctional Facility was granted by the Nigerian Correctional Service administrative authorities. All participants received information about the purpose of the study, procedures involved, and their rights as research participants before data collection began. Participation remained voluntary, and respondents provided informed consent before completing questionnaires or participating in interviews. Confidentiality of all participants was maintained through anonymous data collection and secure storage of research records. The study followed established ethical standards for research involving human participants.

Benefits and Risks: There is little risk associated with the study. Certain interview questions, such as those concerning depression or trauma, may be upsetting. The interview will be paused and a mental health referral will be made if an inmate becomes agitated. Interviewers are trained to respond in a supportive manner. Participation in studies helps prisoners by providing their needs a voice. To prevent undue inducement, no rewards were provided (except from modest tokens like stationery). The danger to employees is also low; anonymity was also emphasized so that management cannot identify specific employees based on their responses, particularly when it comes to training.

The Declaration of Helsinki and Nigeria's national research ethics code are followed in every step. The study was approved by the institution and subject to particular control because it involves inmates (e.g. review by a summoned ethical committee for prisoner research). Only anonymized results were shared with jail officials in order to guide training and mental health service enhancements.

FINDINGS

The Prevalence and Severity of Mental Health Disorders among Inmates in Kaduna State Correctional Facilities

Table 1: Distribution of Depression Severity Levels (PHQ-9) Among Inmates in Kaduna Correctional Facility (N = 200)

phq9_severity	Frequency	Percentage
None/Minimal	19	9.50
Mild	66	33.00
Moderate	79	39.50
Moderately Severe	31	15.50
Severe	5	2.50
Total	200	100.00

The PHQ-9 test for depression severity among 200 inmates at the Kaduna Correctional Facility shows that the mental health of the prison population is very bad. Only 9.5% (19 inmates) said they didn't have any or very few depressive symptoms. This means that most of the inmates are going through some kind of mental distress. The largest group, 39.5% (79 inmates), was in the moderate depression group. This means that almost four out of ten inmates are dealing with clinically significant depressive symptoms that probably make it hard for them to get through the day. Also, one-third (33%) of inmates said they were mildly depressed, and a worrying 15.5% (31 inmates) said they were moderately severely depressed. Most worryingly, 2.5% (5 inmates) scored in the severe depression range, which means they need mental health help right away. In total, 57.5% of inmates (in the moderate to severe categories) have depression levels that need to be treated by a doctor.

Table 2: Prevalence of Probable Mental Health Disorder (GHQ-28 Caseness) Among Inmates in Kaduna Correctional Facility (N = 200)

GHQ Case	Frequency	Percentage
Non-case	4	2.00
Case	196	98.00
Total	200	100.00

A screening of 200 inmates at the Kaduna Correctional Facility using the General Health Questionnaire (GHQ-28) shows that a very high number of them are likely to have mental health problems. A staggering 98% (196 inmates) tested positive as "cases," which means they were experiencing severe psychological distress that required clinical attention. Conversely, merely 2% (4 inmates) were designated as non-cases, indicating that nearly the entire inmate population is facing significant mental health issues encompassing somatic symptoms, anxiety, insomnia, social dysfunction, and severe depression. This nearly universal occurrence of psychological morbidity significantly surpasses expectations for the general population, indicating a mental health crisis within the correctional environment.

Table 3: Summary Statistics for PHQ-9 and GHQ-28 Total Scores Among Inmates in Kaduna Correctional Facility (N = 200)

Percentiles		Smallest		
1%	0	0		
5%	2	0		
10%	5	0	Obs	200
25%	7	0	Sum of Wgt.	200
50%	10		Mean	10.19
		Largest	Std. Dev.	4.564876
75%	13	20		
90%	16	21	Variance	20.83809
95%	18	22	Skewness	-.0320428
99%	21.5	22	Kurtosis	2.921546
GHQ Total				
Percentiles		Smallest		
1%	2.5	0		

5%	10.5	1		
10%	13	4	Obs	200
25%	17.5	4	Sum of Wgt.	200
50%	24		Mean	23.755
		Largest	Std. Dev.	
75%	13	44		
90%	16	44	Variance	77.46229
95%	18	45	Skewness	.0836459
99%	21.5	52	Kurtosis	3.224078

The descriptive statistics for the PHQ-9 depression scale indicate a mean score of 10.19 (SD = 4.56) among inmates in Kaduna Correctional Facility. This average falls within the moderate depression range (10 to 14) according to PHQ-9 scoring guidelines. The median score of 10 shows that half of the inmates scored at or above the clinical threshold for moderate depressive symptoms. Scores ranged from 0 to 22, while the interquartile range (7 to 13) indicates that the middle 50 percent of inmates reported depressive symptoms within this interval. The 75th percentile score of 13 suggests that a quarter of the inmates fall within the moderate to moderately severe depression categories. The skewness value of -0.03 indicates an almost symmetrical distribution of scores, while the kurtosis value of 2.92 suggests a distribution close to normal. These findings indicate a substantial burden of depressive symptoms among inmates, with many individuals reporting symptom levels that require clinical attention.

Descriptive statistics for the GHQ-28 total score reveal a mean score of 23.76 (SD = 8.80), which is far above the commonly used caseness threshold of 4 or 5 for identifying psychological distress. The median score of 24 indicates that half of the inmates recorded GHQ-28 scores at or above this level. Scores ranged from 0 to 52, reflecting considerable variation in psychological wellbeing among the study population. The interquartile range (17.5 to 31) shows that the central half of respondents experienced substantial psychological distress, with the 25th percentile score of 17.5 already far exceeding the caseness threshold. The 75th percentile score of 31 and the maximum score of 52 further demonstrate that a sizeable proportion of inmates experienced severe levels of psychological disturbance. The skewness value of 0.08 indicates an approximately symmetrical distribution, while the kurtosis value of 3.22 suggests a distribution close to normal.

Table 4: Distribution of Depression Severity Levels (PHQ-9) Among Inmates in Kaduna Correctional Facility (N = 200)

Gender	None/Mini	Mild	Moderate	Moderately Severe	Severe	Total
Male	16	52	60	29	2	159
	10.06	32.70	37.74	18.24	1.26	100.00
Female	3	14	19	2	3	41
	7.32	34.15	46.34	4.88	7.32	100.00
Total	19	66	79	31	5	200
	9.50	33.00	39.50	15.50	2.50	100.00

The PHQ-9 depression test given to 200 inmates at the Kaduna Correctional Facility shows that most of them have clinically significant depressive symptoms, which is a big mental health problem. Only 19 of the 200 inmates (9.5%) said they weren't very depressed or weren't depressed at all. This shows that a lot of people in the facility are having mental health problems. The biggest group, 39.5% (79 inmates), had moderate depression.

This means that almost four out of ten prisoners probably have symptoms that make it hard for them to do their daily tasks and have fun. Another 33% (66 inmates) said they were mildly depressed, which could mean that their symptoms are getting worse without help. Most worrying, 15.5% (31 inmates) had moderate to severe depression, and 2.5% (5 inmates) had severe depression, which means they need to see a doctor right away and might hurt themselves. More than half of the prisoners (57.5%) were moderately to severely depressed, which means they needed therapy.

Table 5: Distribution of Depression Severity Levels (PHQ-9) by Age Group Among Inmates in Kaduna Correctional Facility (N = 200)

Age	None/Mini	Mild	Moderate	Moderately Severe	Severe	Total
Under 18	0	3	3	2	0	8
	0.00	37.50	37.50	25.00	0.00	100.00
18–25	5	27	22	10	3	67
	7.46	40.30	32.84	14.93	4.48	100.00
26–35	8	16	36	6	1	67
	11.94	23.88	53.73	8.96	1.49	100.00
36–45	3	14	12	10	1	40
	7.50	35.00	30.00	25.00	2.50	100.00
46 and above	3	6	6	3	0	18
	16.67	33.33	33.33	16.67	0.00	100.00
Total	19	66	79	31	5	200
	9.50	33.00	39.50	15.50	2.50	100.00

The age-stratified analysis of PHQ-9 depression severity among 200 inmates indicates that the mental health burden varies significantly across different age groups in Kaduna Correctional Facility. There are the most people with moderate depression (53.73%, or 36 inmates) in the 26–35 years age group. This is the highest percentage of moderate depression in any age group. This group also has the lowest percentage of mild depression (23.88%) and the second lowest percentage of moderately severe (8.96%) and severe (1.49%) depression. This implies that the symptoms are focused at a clinically relevant yet controllable intensity. The age group of 18 to 25 years exhibits the most concerning trend for severe psychopathology. It has the highest percentage of inmates with severe depression (4.48%, 3 inmates) and the second-highest percentage of inmates with moderately severe depression (14.93%, 10 inmates).

This means that younger inmates may be more likely to develop more serious types of depression that need to be treated right away. There are only 8 people in the Under 18 group, and 37.50% of them have mild depression and 37.50% have moderate depression. None of them are severely depressed, which means that even the youngest prisoners are very upset. There is a bimodal pattern in the 36–45 age group, with 35% having mild depression and 30% having moderate depression. But 25% (10 inmates) have moderately severe depression, which is the second-highest rate of this level of severity. People aged 46 and older are the least likely to be depressed or only slightly depressed (16.67%, 3 inmates), but they are also the most likely to be mildly (33.33%), moderately (33.33%), or moderately severely (16.67%) depressed.

These age-based patterns show that depression affects people of all ages, but younger and middle-aged adults have the most severe symptoms. This requires age-sensitive mental health screening protocols and targeted interventions that address the developmental and situational stressors specific to each age cohort within the correctional environment.

Table 6: Distribution of Depression Severity Levels (PHQ-9) by Marital Status Among Inmates in Kaduna Correctional Facility (N = 200)

Status	None/Mini	Mild	Moderate	Moderately Severe	Severe	Total
Single	12	37	41	18	3	11
	10.81	33.33	36.94	16.22	2.70	100.00
Married	7	29	38	13	2	89
	7.87	32.58	42.70	14.61	2.25	100.00
Total	19	66	79	31	5	200
	9.50	33.00	39.50	15.50	2.50	100.00

The examination of depression severity by marital status among 200 inmates indicates significant disparities between single and married individuals within Kaduna Correctional Facility. Of the 111 single inmates, the most (36.94%, 41 inmates) have moderate depression, followed by 33.33% (37 inmates) with mild depression, 16.22% (18 inmates) with moderately severe depression, and 2.70% (3 inmates) with severe depression. Only 10.81% (12 inmates) of single inmates say they have no or very few signs of depression. Married inmates (n = 89) exhibit a marginally elevated prevalence in the moderate category (42.70%, 38 inmates), whereas 32.58% (29 inmates) endure mild depression, 14.61% (13 inmates) moderate depression, and 2.25% (2 inmates) severe depression. There is also a slightly lower percentage (7.87%, 7 inmates) of married inmates in the no/minimal depression category than there is for single inmates. In general, both groups show a lot of depressive symptoms, with more than half of each group scoring in the moderate to severe range (55.86% for singles and 59.56% for married people).

The data indicate that marital status does not significantly affect the prevalence of depression; instead, the incarcerated environment seems to have a widespread psychological influence regardless of marital history. Married prisoners, on the other hand, have a slightly higher rate of moderate depression. This may be because they are dealing with the stress of being away from their spouse and family. Single prisoners, on the other hand, have a slightly higher rate of moderately severe and severe depression.

Level of Mental Health Training and Knowledge among Correctional Facility Staff

Table 7: Staff Perception of Preparedness to Identify Signs of Mental Illness Among Inmates in Kaduna Correctional Facility (N = 43)

Do you feel equipped to identify signs of mental illness in inmates	Frequency	Percentage
No	10	23.26
Yes	33	76.74
Total	43	100.00

An evaluation of staff readiness to spot mental illness among inmates at the Kaduna Correctional Facility shows that most of the staff members believe they are able to do so. Of the 43 staff members who answered, 76.74% (33 staff members) said they felt able to spot signs of mental illness in inmates. This shows that they were fairly confident in their ability to observe and screen inmates. However, almost a quarter of the staff (23.26%, 10 respondents) said they don't feel ready for this important job. This finding is especially important because it shows that mental health problems are very common among inmates. In fact, 98% of those who were screened had probable mental health issues, and 57.5% of those who were screened had moderate to severe depression. A

quarter of the staff not being ready could make the facility's mental health safety net less effective. If symptoms are missed or not recognised, it could take longer for interventions to happen, inmates' mental health could get worse, or crises could happen that could have been avoided if they had been identified earlier. These results suggest that most staff members are confident in their abilities, but targeted training programs are still needed to make sure that everyone, no matter what their job is or how much experience they have, learns how to spot early warning signs of mental distress.

Table 8: Staff Confidence in Responding to Mental Health Crises in Kaduna Correctional Facility (N = 43)

How confident are you in responding to a mental health crisis	Frequency	Percentage
Not Confident	3	6.98
Somewhat Confident	12	27.91
Very Confident	28	65.12
Total	43	100.00

The evaluation of staff confidence in addressing mental health crises at Kaduna Correctional Facility indicates a largely assured workforce, albeit with significant disparities in self-confidence. The majority of staff, 65.12% (28 respondents), said they were "Very Confident" in their ability to handle mental health emergencies. This shows that the staff has a strong base of crisis response skills. Another 27.91% (12 staff members) said they were "Somewhat Confident," which means they have some skills but could use more training or help to feel completely confident. A small but worrying 6.98% (3 respondents) said they felt "Not Confident" in crisis situations, which shows that the facility's emergency response system is weak. Overall, more than one-third of the staff (34.89%, 15 respondents) do not meet the "Very Confident" standard. This is important because mental health disorders are very common among inmates, with 98% screening positive for probable mental health conditions and 2.5% already in the severe depression category needing immediate help. This lack of confidence makes us wonder if staff have had enough training in crisis intervention, if they can get help during emergencies, and if there are clear rules for dealing with severe psychological distress. The results show that the facility has a core group of very confident staff members. However, to raise the confidence of all staff members, targeted training programs should be prioritized that focus on crisis de-escalation, suicide prevention, and emergency mental health response.

Table 9: Staff Ratings of Mental Health Resource Adequacy in Kaduna Correctional Facility (N = 43)

Rate the adequacy of mental health resources in your facility	Frequency	Percentage
Excellent	2	4.65
Very Good	2	4.65
Good	14	32.56
Fair	14	32.56
Poor	11	25.58
Total	43	100

The evaluation of mental health resource adequacy by staff in Kaduna Correctional Facility shows a largely negative perception among personnel. The largest proportion of staff rated resources as either fair or good, each representing 32.56 percent (14 respondents). A further 25.58 percent (11 staff members) rated the resources as poor, which indicates substantial dissatisfaction and concern about the adequacy of available services. Only a small proportion of staff reported positive assessments. 4.65 percent (2 respondents) rated the resources as very good, while another 4.65 percent (2 respondents) rated them as excellent.

Overall, more than half of the staff 58.14 percent (25 respondents) rated the available mental health resources as fair or poor, which reflects widespread concern about the sufficiency and quality of mental health materials, trained personnel, facilities, and support systems within the correctional facility. This perception becomes more concerning when placed alongside earlier findings which show near universal psychological distress among inmates, with 98 percent meeting GHQ caseness and 57.5 percent experiencing moderate to severe depression.

The contrast between the high prevalence of mental health needs among inmates and the negative staff evaluations of available resources indicates a serious gap in service delivery capacity. Staff likely experience limitations in their ability to provide adequate care, make timely referrals, and manage mental health crises within the facility. Such constraints increase the risk of professional burnout and moral distress among staff, while also affecting the quality of mental health care delivered to inmates.

Inmate Perceptions of Mental Health Support and Environment

Table 10: Inmate Perceptions of Mental Health Support, Staff Understanding, Isolation, and Confidential Spaces in Kaduna Correctional Facility (N = 199)

Question	Response	Frequency	Percentage
Have you received any mental health support since incarceration?	No	88	44.44%
	Yes	110	55.56%
Do you feel staff understand and support inmates with mental health needs?	No	73	36.87%
	Yes	125	63.13%
Have you been isolated or punished due to your mental condition?	No	128	64.65%
	Yes	70	35.35%
Are there private and confidential spaces to discuss your health issues?	No	100	50.25%
	Yes	99	49.75%
	Total	199	100.00%

The assessment of inmates' perceptions regarding mental health support and the environment at Kaduna Correctional Facility reveals a complex situation marked by diverse experiences and significant shortcomings in service delivery. A small majority of inmates (55.56%, 110 respondents) said they had received some kind of mental health support since being incarcerated. This means that they had access to mental health support. On the other hand, a large minority of 44.44% (88 inmates) said they had not received any help at all. This is especially scary because we already know that almost all of these people are mentally ill (98% GHQ caseness) and have high rates of moderate to severe depression (57.5%). This means that a lot of the inmates who probably have mental health issues aren't getting the help they need. When it comes to staff understanding and support, the picture gets better. 63.13% of inmates (125 inmates) agree that staff understand and help inmates with mental health needs, while 36.87% of inmates (73 inmates) think that staff are not helpful. This shows that most inmates feel supported, but more than a third of them say that staff interactions don't make sense, which makes it hard for them to get therapy and ask for help. In terms of being punished or isolated because of their mental health, 35.35% (70 inmates) said they had been punished or isolated because of their mental health problems. This is a

very high percentage that makes you wonder how the facility deals with mental health crises and if they are using therapeutic alternatives to punishment. The other 64.65% (128 inmates) said they had not had these kinds of things happen to them. Most importantly, when it comes to privacy and confidentiality, the inmate population is almost evenly split: 50.25% (100 inmates) said there are not any private or confidential places to talk about health issues, while 49.75% (99 inmates) said there are such places. The fact that almost half of the people who have access to the facility suggests that access isn't the same in all areas or that people have different ideas about what makes a space private. This shows that it is hard to create places where prisoners feel safe talking about their mental health problems.

Table 11: Types of Mental Health Support Received by Inmates in Kaduna Correctional Facility (N = 110)

Kind of Therapy	Frequency	Percentage
Counseling	44	40.00
Group Therapy	12	10.91
Medication	54	49.09

The types of therapy that the 110 inmates who said they had gotten mental health help since being in jail show important trends in how services are given at Kaduna Correctional Facility. Almost half (49.09%, 54 inmates) of all interventions were for medication, which was the most common type of help. The fact that pharmacological treatment is so common suggests that the facility takes a biomedical approach to mental health care, with psychotropic drugs being the main way to deal with psychological distress. Medication can help a lot of mental health issues, but the fact that it is the most common treatment makes people wonder how easy it is to find and use therapies that don't involve drugs. Counselling is the second most popular type of help, with 40% (44 inmates) of people who used the services getting it. This means that a lot of people who want help can get psychological support and talk therapy. But the fact that 40% of people get counselling and 49% get medication suggests that psychosocial treatments may not be as easy to get as drug treatments. The most important thing to remember is that Group Therapy was the least popular option, helping only 10.91% (12 inmates) of those who needed it. It's worrying that group therapy isn't used more often, especially since it has been shown to work well in prisons. In these situations, peer support, shared experiences, and less stigma can all help make therapy more effective while making the most of the staff that is available. The limited availability of group therapy may be due to problems with logistics, a lack of trained facilitators, or the fact that institutions prefer one-on-one therapy. These results show that the mental health service model is mostly based on medication, with only a few options for group therapy and moderate access to counselling. Because 98% of prisoners have mental health issues, the current range of treatments may not be enough to meet the different psychological needs of people who are in prison.

Table 12: Frequency of Access to Medical Doctors Among Inmates in Kaduna Correctional Facility (N = 199)

How often do you have access to a medical doctor?	Frequency	Percentage
Monthly	79	39.70
Never	45	22.61
Rarely	29	14.57
Weekly	46	23.12
Total	199	100.00%

The evaluation of medical doctor accessibility among 199 inmates at Kaduna Correctional Facility indicates substantial disparities in healthcare access, which may have serious consequences for the provision of mental health services. The majority of inmates, 39.70% (79 respondents), said they saw a doctor once a month, which was the most common frequency of medical contact. 23.12% (46 inmates) said they had access to medical care every week. This means that almost a quarter of the population has regular, frequent chances to see a doctor.

However, a large number of inmates have trouble getting medical care: 22.61% (45 inmates) said they never saw a doctor, and another 14.57% (29 inmates) said they rarely saw one. More than a third of the inmates (37.18%, or 74 inmates) either never see a doctor or only see one very rarely. This is a big problem with providing healthcare. This lack of access is especially concerning because mental health disorders are so common, with 98% of GHQ cases and 57.5% of moderate to severe depression cases needing medical evaluation, medication management, and ongoing monitoring by trained healthcare professionals. The fact that almost 40% of inmates have access to medical care every month suggests that medical care is available on a regular basis. However, the fact that only 23% have access every week and 37% do not have enough access shows that there is a lot of inconsistency between different parts of the facility or between different groups of inmates.

Table 13:

phq9_total	Have you received any mental health support since incarceration?		Total
	No	Yes	
None/Minimal	10	8	18
Mild	23	42	65
Moderate	39	40	79
Moderately Severe	15	16	31
Severe	2	4	6
Total	89	110	199

A cross-tabulation of the severity of depression and the receipt of mental health support among 199 inmates at the Kaduna Correctional Facility shows important patterns in how services are used and possible treatment gaps at different levels of psychological distress. Among inmates with little or no depression ($n = 18$), a slight majority (55.56%, 10 inmates) said they did not get any mental health support. On the other hand, 44.44% (8 inmates) did get support, which could mean that they were either getting the right kind of help or that limited resources were being misallocated to people who weren't showing any symptoms. In the mild depression category ($n = 65$), a significant change takes place: most of the inmates (64.62%, 42 inmates) say they got help, while 35.38% (23 inmates) say they didn't, which means that more than a third of those with early symptoms are not getting help from current services. The patterns in the moderate to severe categories are the most worrying because they show that clinical intervention is most urgently needed. Of the 79 inmates with moderate depression, 49.37% (39 inmates) did not get help and 50.63% (40 inmates) did, which means that half of those with clinically significant depression are not getting mental health care. In the moderately severe category ($n = 31$), 48.39% (15 inmates) remain unsupported, while 51.61% (16 inmates) receive care, indicating a significant treatment gap. Most alarmingly, one-third (33.33%, 2 inmates) of the severe depression group ($n = 6$) said they had not received any mental health support at all, even though they were at the highest risk of self-harm, suicide, and severe functional impairment. Overall, only 60 of the 116 inmates (51.72%) in the moderate to severe range are getting help, leaving 56 inmates (48.28%) with clinically significant depression with no help at all. These results show that there is a big gap between the need for mental health care and the care that is available at the facility. The data indicate that support is reaching numerous inmates across all severity levels, including individuals with mild and minimal symptoms; however, the system is failing to provide universal coverage for those who are most in need. The significant treatment disparities among moderate, moderately severe, and severe depression categories necessitate immediate focus on referral pathways, screening protocols, resource distribution, and methods for involving the most distressed inmates who may be least inclined to seek assistance voluntarily.

The aforementioned findings are corroborated by a Correctional Officer who stated that;

"It is a process. First, you identify the issue. Then you counsel them with scriptures. Beyond the spiritual aspect, you also check their social needs. We provide social, musical, and spiritual support within our resources.... We

do not have psychiatry services. Sometimes we isolate the person in a cell, but that is not common. Usually, we refer them to external psychiatry services. If medication is required, relatives buy it and we administer it.... We lack facilities, funds, and support. Even when we identify inmates in need, assistance is limited. We sometimes rely on relatives, but that is not always easy. Fair treatment is inconsistent. There are differences among staff and inmates. Sometimes they are treated fairly, but often they are misunderstood.... We need a psychiatrist on the ground in every facility. A hospital or psychiatric unit is necessary. Referrals are costly. Staff should receive psychiatry training to manage cases better. Everyone should be mentally sound. A sound mind leads to better outcomes for staff and inmates. Since inmates return to society, rehabilitation is vital. Proper reintegration requires facilities and resources. Without funding and leadership, rehabilitation fails. We need funding, leadership, and equipment to make rehabilitation effective."

Another also stated that;

Through their behaviours. How they relate with staff, fellow inmates, and their general attitude... But here in Zaria, we do not have a mental health officer. We have a psychologist, though she is not currently on ground. In places like Kaduna or Lagos, they have specialists and procedures in place... We only have a psychologist, but she is absent now. We also have an asylum for mentally ill inmates, but it is not fully functional.... Funding. That is the major challenge. We also lack maintenance, which ties back to funding... Honestly, no. They are not treated fairly. We lack the materials and resources to support them. Rehabilitation centres in Nigeria also lack proper facilities. They focus mostly on drugs and money, but not holistic care. Motivation and awareness are missing."

The qualitative narratives from staff members show that the mental health service delivery system in Kaduna Correctional Facility is resourceful, even though the facility has serious structural problems. Staff describe a multi-faceted but severely limited way of helping inmates with their mental health. They start by figuring out what is wrong with their mental health and then use spiritual counselling and scripture to help them, as well as music therapy and other social and recreational activities. However, none of these efforts involve professional psychiatric services. Staff have to rely on outside referrals for serious cases because there are no mental health professionals on site, including a psychologist who is said to be absent from duty. This is difficult because of high costs and logistical issues. When inmates need medication, staff have to rely on their families to buy it and bring it to them. This makes things even harder for inmates who have families that are not supportive or are poor. There is said to be an asylum for mentally ill inmates at the facility, but it is not working because there aren't enough resources or maintenance. Staff openly admit that inmates with mental health issues are often treated unfairly. Their responses vary from compassionate support to misunderstanding and punishment, such as putting them in solitary confinement, which staff say is rare. The main barriers that have been found are always financial: not enough money, not enough equipment, not enough facilities, and not enough maintenance all keep care from getting better. Staff make clear suggestions, such as the urgent need for a psychiatrist to be permanently stationed in every facility, dedicated psychiatric units or hospitals, comprehensive mental health training for all correctional personnel, and strong leadership that is committed to rehabilitation. They stress that meaningful rehabilitation and successful reintegration of inmates into society are still out of reach without the right funding and infrastructure. The stories show a basic contradiction: staff know what good mental health care looks like and how important it is for the safety of both inmates and the public, but they work in a system that doesn't give them the tools, people, or support they need to provide that care. This disconnect between knowledge and ability is a major failure at the policy and institutional levels, leaving both staff and inmates to deal with a mental health landscape that is more about gaps than services.

DISCUSSION OF THE RESULTS

This study examined the prevalence of mental health disorders among inmates in Kaduna Correctional Facility, staff preparedness to respond to psychological crises, and the adequacy of institutional resources for mental health care. The findings reveal a severe mental health burden within the correctional environment and highlight major structural limitations in the delivery of psychiatric services.

The first key finding concerns the extremely high prevalence of psychological distress among inmates. Screening results show that almost the entire inmate population experiences significant mental health symptoms, with more than half presenting moderate to severe depressive symptoms that require clinical attention. Similar patterns appear across prison systems globally. Studies of correctional populations consistently report higher rates of depression, anxiety, and psychological distress compared with community samples. For example, research conducted in Ethiopian prisons using the PHQ-9 reported a depression prevalence of 55.9 percent among inmates, which closely resembles the distribution observed in this study. Global systematic reviews of prison mental health also indicate that incarcerated populations experience mental disorders at rates several times higher than those found in the general population. The findings from Kaduna therefore align with international evidence which shows that imprisonment environments often intensify existing psychological vulnerabilities.

Several factors likely contribute to this high prevalence of mental health problems. Prison environments often involve overcrowding, social isolation, uncertainty regarding legal outcomes, limited family contact, and restricted access to healthcare services. These structural conditions increase stress and emotional instability among inmates. The age distribution observed in the present study also suggests that younger prisoners may experience higher levels of psychological distress. Previous studies conducted in European correctional systems similarly report higher vulnerability to depression among younger inmates. Such findings suggest that psychological distress in prisons emerges from the interaction between individual vulnerability and institutional conditions.

The second major finding relates to the preparedness and mental health literacy of correctional staff. A majority of staff members report confidence in responding to mental health crises, yet a substantial proportion indicate lower confidence levels and acknowledge gaps in training and institutional support. These results mirror findings from international research which shows that correctional officers often face mental health crises without adequate professional training. Studies in several correctional systems report that less than half of prison staff receive formal mental health training. Staff who receive structured training demonstrate significantly higher knowledge scores and improved crisis response abilities. The results from Kaduna therefore suggest that staff confidence may reflect personal experience rather than structured professional preparation.

Resource adequacy emerged as another critical challenge within the correctional facility. Many staff members rated the available mental health resources as either fair or poor, indicating widespread dissatisfaction with the institutional support system. This perception is particularly concerning when considered alongside the extremely high prevalence of inmate psychological distress. Effective mental health care in correctional settings requires trained professionals, functional treatment units, consistent medication supply, and appropriate therapeutic spaces. The absence of these elements creates significant barriers to effective care delivery.

Qualitative narratives from correctional staff further illustrate these structural limitations. Staff describe relying primarily on informal coping strategies such as counselling, spiritual guidance, and external referrals when managing inmates with psychological difficulties. Professional psychiatric services are largely absent within the facility, and treatment often depends on external referrals or family support for medication procurement. These accounts reveal a system in which staff recognise the importance of mental health care but lack the institutional resources necessary to deliver effective services.

The findings also reveal important gaps in access to mental health support among inmates. Although more than half of inmates report receiving some form of support, a substantial proportion indicate that they have never received any mental health intervention since incarceration. This treatment gap is particularly concerning among inmates with moderate to severe depressive symptoms. In correctional health systems, untreated mental illness increases the risk of self-harm, behavioural disturbances, and long-term social reintegration challenges. The presence of such treatment gaps therefore represents a serious public health concern.

Inmate perceptions of the correctional environment further highlight structural barriers to effective mental health care. A considerable proportion of inmates report experiencing isolation or punishment related to their psychological condition. These findings suggest that mental illness may sometimes be managed through disciplinary measures rather than therapeutic interventions. Previous studies of prison environments similarly

describe institutional cultures where emotional vulnerability is discouraged and psychological distress is misunderstood. Such conditions reduce the likelihood that inmates will seek help or disclose mental health concerns.

Taken together, the quantitative and qualitative findings reveal a correctional mental health system characterised by high levels of psychological need but limited service capacity. The absence of dedicated mental health professionals, limited training for correctional staff, and insufficient infrastructure collectively undermine the ability of the facility to provide adequate care. This gap between mental health demand and institutional capacity represents a critical policy challenge for the correctional system.

Strengthening mental health services within correctional facilities therefore requires coordinated institutional reform. Expanding access to psychiatric professionals, improving staff training programmes, and establishing structured referral pathways would significantly improve service delivery. Creating confidential consultation spaces and integrating mental health screening into routine correctional healthcare procedures may also enhance early identification and treatment of psychological disorders among inmates.

Overall, the study highlights the urgent need for comprehensive mental health reform within correctional institutions. Addressing the mental health needs of incarcerated populations is essential not only for individual wellbeing but also for institutional safety, rehabilitation outcomes, and successful reintegration into society.

STUDY LIMITATIONS

Several limitations should be considered when interpreting the findings of this study. First, the study employed a cross-sectional design, which limits the ability to establish causal relationships between incarceration conditions and mental health outcomes. Second, the research was conducted within a single correctional facility, which may limit the generalisation of findings to other correctional institutions in Nigeria or other regions. Third, the use of self-report instruments such as the GHQ and PHQ scales introduces the possibility of response bias, since participants may underreport or exaggerate symptoms. Finally, logistical constraints within the correctional environment limited the availability of clinical diagnostic interviews, which would have strengthened the assessment of psychiatric disorders. Despite these limitations, the study provides valuable insight into the mental health conditions of inmates and the institutional capacity to address these needs within Nigerian correctional facilities.

CONCLUSION

This study reveals a profound and systemic mental health crisis within Kaduna State correctional facilities, characterized by near-universal psychological distress among inmates, critical gaps in staff training and confidence, and severely inadequate resources for mental health service delivery. The quantitative results show that 98% of prisoners screen positive for probable mental health disorders on the GHQ-28, with 57.5% having moderate to severe depression that necessitates clinical intervention. However, one-third of those with severe depression and nearly half of those with moderate depression receive no mental health support at all. The qualitative accounts shed light on the human reality that lies behind these figures: employees, despite their good intentions and resourcefulness, are compelled to rely on spiritual counselling, family-purchased medications, and occasionally expensive outside referrals because they lack access to psychiatrists, psychologists, or basic mental health infrastructure. Vulnerable people with unsupportive families are further disadvantaged by the facility's non-functional asylum, lack of a single on-site mental health professional despite a psychologist reportedly absent from duty, and reliance on inmates' relatives to supply necessary medications. Although staff confidence in crisis response is moderately high, the fact that more than one-third feel unprepared and that 58% consider mental health resources to be fair or poor undermines this confidence. Only half of prisoners have access to private areas for talking about health issues, and 35% of prisoners report being isolated or punished because of their mental illness, demonstrating the persistence of the punitive culture. The convergence of epidemiological, clinical, and experiential evidence shows that Kaduna State's correctional system is essentially failing in its obligation to provide mental healthcare, sustaining a cycle of suffering, neglect, and lost chances for rehabilitation that eventually jeopardises human dignity and public safety.

RECOMMENDATIONS

a) Creation of a Thorough On-Site Mental Health Infrastructure and Staff.

At least one full-time psychiatrist, assisted by a multidisciplinary team comprising clinical psychologists, psychiatric nurses, and qualified social workers, must be promptly assigned to each major correctional facility in Kaduna State by the government through the Nigerian Correctional Service and Federal Ministry of Health. At the same time, Zaria Correctional Facility's non-operational asylum needs to be rehabilitated and operationalized as a specialized psychiatric observation and treatment unit, furnished with suitable drugs, therapeutic materials, and private consultation areas. The current dehumanizing practice of depending on the relatives of prisoners to buy necessary medications must end, and this infrastructure development must be accompanied by sustainable funding mechanisms that guarantee consistent procurement of psychotropic medications.

b) Establish Clear Referral Procedures and Require all Correctional Staff to Complete Thorough Mental Health Training.

With a focus on crisis de-escalation, suicide prevention, early detection of psychological distress, and trauma-informed communication, the Nigerian Correctional Service is required to create and implement a competency-based mental health training program for all correctional officers, administrators, and medical personnel.

Author Contributions

Author 1 conceived the study, developed the research design, conducted data collection, performed the statistical analysis, interpreted the findings, and drafted the manuscript.

Author 2 supervised the research process, contributed to the development of the study design, and provided critical revisions to improve the intellectual content of the manuscript.

Author 3 assisted with data interpretation, reviewed the manuscript for clarity and academic quality, and approved the final version for submission.

All authors read and approved the final version of the manuscript.

Conflict of Interest

The authors report no conflicts of interest in relation to this study.

Data Availability

The data generated and analysed during this study are available from the corresponding author upon reasonable request.

REFERENCES

1. Abdulmalik, J., Adedokun, B., & Baiyewu, O. (2014). Prevalence and correlates of mental health problems among awaiting trial inmates in a Prison facility in Ibadan, Nigeria. *African journal of medicine and medical sciences*, 43 Suppl 1, 193-19.
2. Coulling, R., Johnston, M. S., & Ricciardelli, R. (2024). "We must be mentally strong": Exploring barriers to mental health support in correctional services. *Frontiers in Psychology*, 15, 1258944. <https://doi.org/10.3389/fpsyg.2024.1258944>
3. Kim, J., Caspers, H., & Jahic, I. (2024). Organizational climate and its impact in a women's prison on the mental health of correctional staff and inmates. *Journal of Contemporary Criminal Justice*. <https://doi.org/10.1177/10439862241272335>

4. Sundt, J., Reiter, K., & Williams, B. (2024). The interdependence of caring, safety, and health in correctional settings: Analysis of a survey of security staff in a large county jail system. *Social Science & Medicine*, 345, 116683. <https://doi.org/10.1016/j.socscimed.2024.116683>
5. Woodall, J. (2024). What works to promote staff health in prison settings: A systematic review. *International Journal of Prison Health*, 20(3), 257–272. <https://doi.org/10.1108/IJPH-11-2023-0082>
6. Alwi, P., & Ayubi, D. (2024). Determinants of mental health literacy among correctional officers. *Journal of Health Promotion and Health Education*, 12(2), 145–154.
7. Flumo, R., Valera, P., Malarkey, S., & Acevedo, S. (2024). Improving the mental health and well-being of correctional officers through mental health first aid training. *Journal of Police and Criminal Psychology*, 39(2), 210–223. <https://doi.org/10.1007/s11896-023-09620-3>
8. Shields, R. E., Ricciardelli, R., & Jamshidi, L. (2024). Mental health knowledge, stigma, and service use intentions among correctional workers. *Canadian Journal of Criminology and Criminal Justice*, 66(3), 345–363.
9. Valera, P., Malarkey, S., Owens, M., & Sinangil, N. (2024). Remote mental health first aid training for correctional officers: A pilot study. *Psychological Services*. <https://doi.org/10.1037/ser0000742>
10. Bukten, A., Virtanen, S., Hesse, M., Chang, Z., & Kvamme, T. L. (2024). The prevalence and comorbidity of mental health and substance use disorders in Scandinavian prisons 2010–2019: A multi-national register study. *BMC Psychiatry*, 24, 55. <https://doi.org/10.1186/s12888-024-05540-6>
11. Dereje, J., Lami, M., Tilahun, S., Abdi, D., & Cheru, A. (2025). Prevalence of depression and associated factors among prisoners at the Eastern Ethiopia Prison Commission. *International Journal of Prison Health*. <https://doi.org/10.1016/j.ijph.2025.02.006>
12. Emilian, C., Al-Juffali, N., & Fazel, S. (2025). Prevalence of severe mental illness among people in prison across 43 countries: A systematic review and meta-analysis. *The Lancet Public Health*, 10(2), e95–e104. [https://doi.org/10.1016/S2468-2667\(24\)00280-9](https://doi.org/10.1016/S2468-2667(24)00280-9)
13. Favril, L., Rich, J. D., Hard, J., & Fazel, S. (2024). Mental and physical health morbidity among people in prisons: An umbrella review. *The Lancet Public Health*, 9(2), e85–e97. [https://doi.org/10.1016/S2468-2667\(24\)00023-9](https://doi.org/10.1016/S2468-2667(24)00023-9)
14. Abeku, T. (2025). Experts seek end to abuse, torture of mentally ill prison inmates. *The Guardian Nigeria*. https://guardian.ng/news/experts-seek-end-to-abuse-torture-of-mentally-ill-prison-inmates/#google_vignette
15. Al-Rousan, T., Rubenstein, L., Sieleni, B., Deol, H., & Wallace, R. B. (2017). Inside the nation's largest mental health institution: A prevalence study in a state prison system. *BMC Public Health*, 17(1), 342. <https://doi.org/10.1186/s12889-017-4257-0>
16. Alwi, P., & Ayubi, D. (2024). Determinants of Mental Health Literacy Among Correctional Officers. *Jurnal Promkes: The Indonesian Journal of Health Promotion and Health Education*, 12(SI1), 12–19. <https://doi.org/10.20473/jpk.V12.ISI1.2024.12-19>
17. Atilola, O., Ola, B.A., Abiri, G., Sahid-Adebambo, M., Odukoya, O., Adewuya, A.O., Coker, O.A., Folarin, O., & Fasawe, A.A. (2017). Status of mental-health services for adolescents with psychiatric morbidity in youth correctional institutions in Lagos. *Journal of Child & Adolescent Mental Health*, 29, 63 - 83.
18. Beaudry, G., Yu, R., Långström, N., & Fazel, S. (2021). An updated systematic review and meta-regression analysis: Mental disorders among adolescents in juvenile detention and correctional facilities. *Journal of the American Academy of Child and Adolescent Psychiatry*, 60(1), 46–60. <https://doi.org/10.1016/j.jaac.2020.01.015>
19. Bioku, A.A., Alatishe, Y.A., Adeniran, J.O., Olagunju, T.O., Singhal, N., Mela, M., ... Olagunju, A.T. (2021). Psychiatric Morbidity among Incarcerated Individuals in an Underserved Region of Nigeria: Revisiting the Unmet Mental Health Needs in Correction Services. *Journal of Health Care for the Poor and Underserved* 32(1), 321-337. <https://dx.doi.org/10.1353/hpu.2021.0026>.
20. Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research* (2nd ed.). Sage Publications.
21. Fakorede, O. O., Onifade, P. O., Majekodunmi, O. E., & DadeMatthews, A. O. (2023). Nigerian prisoners' experience: prison circumstances, family support and sleep quality. *International journal of prisoner health*, ahead-of-print(ahead-of-print), 524–535. <https://doi.org/10.1108/IJPH-09-2021-0096>

22. Gómez-Figueroa, H., & Camino-Proañó, A. (2022). Mental and behavioral disorders in the prison context. *Revista Española de Sanidad Penitenciaria*, 24(3), 90–98. <https://doi.org/10.18176/resp.00034>
23. Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, 18(1), 59–82. <https://doi.org/10.1177/1525822X05279903>
24. Hjelle, E. G., Bragstad, L. K., Zucknick, M., Kirkevold, M., Thommessen, B., & Sveen, U. (2019). The General Health Questionnaire-28 (GHQ-28) as an outcome measurement in a randomized controlled trial in a Norwegian stroke population. *BMC psychology*, 7(1), 18. <https://doi.org/10.1186/s40359-019-0293-0>
25. Kroenke, K., Spitzer, R. L., & Williams, J. B. (2001). The PHQ-9: validity of a brief depression severity measure. *Journal of general internal medicine*, 16(9), 606–613. <https://doi.org/10.1046/j.1525-1497.2001.016009606.x>
26. Kuranga, A. T., & Yussuf, A. D. (2021). Psychiatric morbidity amongst adolescents in a Nigerian juvenile correctional facility. *South African Journal of Psychiatry*, 27(0), Article a1590. <https://doi.org/10.4102/sajpsychiatry.v27i0.1590>
27. Lafortune, D. (2010). Prevalence and screening of mental disorders in short-term correctional facilities. *International journal of law and psychiatry*, 33 2, 94-100
28. Ogunlesi, A. O., & Ogunwale, A. (2018). Correctional psychiatry in Nigeria: Dynamics of mental healthcare in the most restrictive alternative. *BJPsych International*, 15(2), 35–37. <https://doi.org/10.1192/bji.2017.13>
29. Olagunju, A.T., Oluwaniyi, S.O., Fadipe, B., Ogunnubi, O.P., Oni, O.D., Aina, O.F., & Chaimowitz, G.A. (2018). Mental health services in Nigerian prisons: Lessons from a four-year review and the literature. *International journal of law and psychiatry*, 58, 79-86
30. Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful Sampling for Qualitative Data Collection and Analysis in Mixed Method Implementation Research. *Administration and policy in mental health*, 42(5), 533–544. <https://doi.org/10.1007/s10488-013-0528-y>
31. Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Sage Publications.
32. Reshad, A. I., Biswas, T., Agarwal, R., Paul, S. K., & Azeem, A. (2023). Evaluating barriers and strategies to sustainable supply chain risk management in the context of an emerging economy. *Business Strategy and The Environment*. <https://doi.org/10.1002/bse.3367>
33. Sahara Reporters. (2024). Charles Okah On Life Sentence Reveals How Correctional Service Allows Inmates To Die From Starvation, Medical Negligence. Sahara Reporters. <https://saharareporters.com/2024/12/10/exclusive-charles-okah-life-sentence-reveals-how-correctional-service-allows-inmates-die>
34. Sheehan, D. V., Lecrubier, Y., Sheehan, K. H., Amorim, P., Janavs, J., Weiller, E., Hergueta, T., Baker, R., & Dunbar, G. C. (1998). The Mini-International Neuropsychiatric Interview (M.I.N.I.): the development and validation of a structured diagnostic psychiatric interview for DSM-IV and ICD-10. *The Journal of clinical psychiatry*, 59 Suppl 20, 22–57.
35. Vanguard (2020). World Mental Health Day: 350 psychiatrists serve 200m population - NMA. https://www.vanguardngr.com/2020/10/world-mental-health-day-350-psychiatrists-serve-200m-population-nma/#google_vignette
36. World Health Organization. (n.d.). Health workforce. World Health Organization. Retrieved May 24, 2025, from <https://www.who.int/health-topics/health-workforce>
37. Yun, N. Y., & Ülkü, M. A. (2023). Sustainable Supply Chain Risk Management in a Climate-Changed World: Review of Extant Literature, Trend Analysis, and Guiding Framework for Future Research. *Sustainability*. <https://doi.org/10.3390/su151713199>