# Determinants of Mental Health in Nigeria

## Attahiru Dan-Ali Mustapha[1&2], Funom Theophilus Makama[2&3], Victoria Emike Ologun[4]

[1]Department of Community Medicine, Ahmadu Bellow University Teaching Hospital. Zaria, Kaduna. Nigeria.

[2]Nuffield Centre for International Health and Development. Leeds Institute of Health Sciences, University of Leeds. Leeds. West Yorkshire, United Kingdom.

[3]Human Rights and Global Ethics. School of History, Politics and International Relations, University of Leicester, Leicester. East Midlands, United Kingdom.

[4]Department of Community Medicine, Obafemi Awolowo University Teaching Hospital Complex. Ile-Ife, Osun State, Nigeria.

**ABSTRACT:** Mental health is a serious but grossly neglected issue in Nigeria. Not only has it suffered neglect in the health sector, but alternative practitioners are also getting more involved such as traditionalists, religious leaders, cultural leaders and older relatives of mental health patients. This has contributed to the worsening mental health status of the country. The aim of this review is to search the literature to identify recent determinants of mental health in Nigeria, categorize them based on the Dahlgren and Whitehead's framework and analyse what have been done so far to implement interventions tailored towards these determinants. This should help policy makers make policies that will be effective in the local context and not just adopting policies from elsewhere when trying to salvage this problem.

**KEYWORDS:** Mental health in Nigeria, Dahlgren and Whitehead Framework, 2013 national mental health service delivery policy, Mental Health bill, Terrorism related Mental health disorder

## Introduction

Dahlgren's and Whitehead's 1991 framework of determinants of health [1] is partitioned into semi-circular layers, from the core to four increasingly widening layers as illustrated in Figure 1. These layers define different factors that affect health. Such categorization helps appreciate causes of health problems and strategies in tackling them. Using this framework, determinants of mental health in Nigeria as found in the literature have been categorized. Such determinants include but are not limited to Gender, Substance abuse, family and social factors, stigmatization and discrimination, education, working conditions, religious and traditional factors, wars and disasters etc. The main responses from the Nigerian health systems towards tackling these determinants will be discussed and their effectiveness critically analysed.
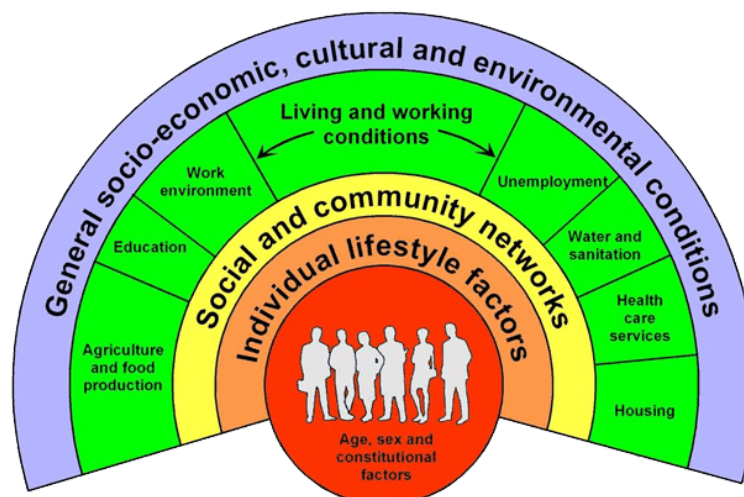
## DISCUSSION



**Figure 1: Dahlgren and Whitehead Determinants of Health Framework**

# International Journal of Current Science Research and Review

ISSN: 2581-8341

**Volume 07 Issue 04 April 2024**

**DOI: 10.47191/ijcsrr/V7-i4-07, Impact Factor: 7.943**

**IJCSRR @ 2024**

www.ijcsrr.org

**A. *Core layer determinants***
- ✓ *Female sex /gender*. Women of reproductive age experience higher levels of psychological distress, depression, and generalised anxiety disorders due to several factors [2-4].

**B. *Layer 1 determinants***
- ✓ *Alcohol misuse and substance abuse*. This is associated with higher rates of depression, suicide, and psychological dysfunction, especially among adolescents [3] [5-7].

**C. *Layer 2 determinants***
- ✓ *Family and social support*. Unsupportive family and community conditions are associated with an increased risk of psychiatric mortality and morbidity [8-12].
- ✓ *Adverse childhood experiences*. These are associated with an increased risk of psychiatric morbidities in later life [11] [12-16].
- ✓ *Incarceration*. Prison conditions are associated with a higher risk of psychiatric morbidities and poor access to mental health services when needed [17-20].
- ✓ *Stigmatisation and discrimination*. The widespread stigma against the mentally challenged in communities significantly threatens their mental health outcomes [21].
- ✓ *Gender-based and intimate partner violence*. This is associated with increased depression, anxiety, and post-traumatic stress disorder [14][22].
- ✓ *Traditional and religious practices*. These practices and beliefs determine the attitudes, health-seeking behaviours and etiological beliefs on mental illness in the country [23-24].

**D. *Layer 3 determinants***
- ✓ *Level of education and knowledge of mental health*. Low education levels and poor mental health knowledge are associated with a higher risk of psychiatric morbidity, lower levels of mental health services utilisation, and poor mental health outcomes [3][25].
- ✓ *Participation of non-governmental and voluntary organisations in providing mental health services*. Adequate involvement of these organisations is associated with better mental health outcomes [26].
- ✓ *Working conditions and occupational stress*. Poor and stressful working situations are associated with more risks of psychiatric morbidities [27-31].
- ✓ *Availability and utilisation of mental health services*. The inadequate mental health services in the country are associated with poor mental health outcomes [26][32].
- ✓ *Involvement of religious leaders and traditional healers in mental health services delivery*. As essential primary care points, if adequately trained and involved, will improve the country's mental health outcomes [33-34].
- ✓ *Availability of mental health professionals*. The country's inadequate number of professionals is associated with poor mental health outcomes [35].
- ✓ *Wars, disasters, conflicts, and other traumatic events*. These ongoing exposures are associated with an increased risk of psychiatric morbidities [30][36-38].
- ✓ *Incarceration*. As explained in layer 2.
- ✓ *Stigmatisation and discrimination*. They are critical barriers to mental health services utilisation and are associated with poor health outcomes in mentally ill patients [21][39].
- ✓ *Unemployment and poverty*. These are associated with a higher risk of depression and a barrier to mental health services utilisation [3-4][32].
- ✓ *Disability and special needs*. It is associated with discrimination and reduced access to mental health services [35][40].
- ✓ *School-based mental health services*. The absence of school-based services is associated with poor mental health outcomes in school-age children [41].

**E. *Layer 4 determinants***
- ✓ *Mental health financing*. The poor funding of mental health services is associated with poor mental health outcomes in the country [42-43].

✓ *Wars, disasters, conflicts, and other traumatic events*. As highlighted in layer 3, together with the resulting impact on productivity and economic development of the country.

✓ *Working conditions and occupational stress*. As explained in layer 3, with a negative impact on productivity.

✓ *Unemployment and poverty*. As explained in layer 3, with other socio-economic consequences.

***Main responses of Nigeria's Health System to mental health conditions***

The first specific effort to address mental health challenges in Nigeria was made in 1991 when the national policy on mental health services delivery placed the responsibility of mental health services provision at the primary healthcare level. After that, in 2013, the Federal Ministry of Health updated the policy to reflect contemporary challenges in mental health issues. However, the lack of appropriate legislation on mental health and the existing and emergent determinants of mental health, mainly terrorism, banditry, and kidnappings across the country, has necessitated a review of the current policy. Consequently, the National Multi-Sectoral Action Plan for the Prevention and Control of Non-Communicable Diseases 2019 – 2025 (NMSAP) attempted to address these new challenges in line with the WHO guidelines for NCD control [35][44]. The figures below critically examine these responses based on the national policies. Table 1: shows the critical responses of the Nigerian health system to mental health and the level of determinants responses are occurring.

**Table 1: the critical responses of the Nigerian health system to mental health and the level of determinants**

| Response objectives/ Key activities (KA) [35][44] | Section(s) of the determinants the responses are occurring [1] | Type of response [35][44] |
|---|---|---|
| 1. To incorporate mental health into the national health, social welfare, education, and criminal justice policy. <br> -KA: engage key stakeholders, mainly relevant government agencies and the National Assembly, to ensure updated legislation. | Layers 2, 3, and 4 | Policy |
| 2. To integrate mental health into the nation's primary care system and decentralise specialist mental health services. <br> -KA: ensure appropriate resources are provided to achieve the response | Layer 3 | Healthcare system |
| 3. To strengthen existing systems and develop new human resource development, information, and communication strategies. <br> -KA: improve research capacity, develop additional resources and disseminate more information on mental health. | Layer 3 | Policy and Healthcare system |
| 4. To strengthen the management of mental health services. <br> -KA: develop an updated policy and legislation to guide mental health management. | Layer 3 | Policy and Healthcare system |
| 5. To encourage intersectoral collaboration with other related Governmental Agencies (GAs) and Non-governmental Organisations. <br> -KA: collaborate with all relevant government agencies, Non-governmental Organisations, stakeholders, and community members in mental health programmes. | Layers 2,3 and 4 | Policy and Healthcare system |

| | | |
|---|---|---|
| 6. To integrate mental health education with educational programmes in schools.<br>-KA: implement drug and substance abuse education modules in the school curriculum. | Layer 2 and 3 determinants | Policy |
| 7. To ensure social and educational inclusion of people with intellectual disabilities and that special attention is paid to women, children, the elderly, detainees, prisoners, and refugees.<br>-KA: develop updated legislation on mental health. | Layers 2 and 3 | Policy and Healthcare system |
| 8. To promote the understanding of mental health in communities.<br>-KA: engage mass media in awareness campaigns and develop appropriate legislation for mental health promotion. | Layers 2 and 3 | Policy and Healthcare |
| 9. To monitor trends, and determinants, ensure surveillance of mental health.<br>-KA -conduct periodic surveys, integrate mental health surveillance into the health information system and develop national indicators for monitoring and evaluation of mental health | All Layers | Policy and Healthcare |

***The most important actors in the responses (including missing actors) with justification***

1. *To incorporate mental health into the national health, social welfare, education, and criminal justice policy:* Federal Ministry of Health and State Ministries of Health. They will primarily coordinate the response through the Mental Health Action Committee. The Mental Health Action Committee coordinates all mental health responses and programmes in the country based on the policy. National Assembly. As the legislative arm of government, the National Assembly is a critical actor in achieving this response. The missing actor here is the State House of Assemblies. Due to federalism, the state legislature must also be adequately engaged to adapt and make similar legislation at the state governments-level for the response to be more effective [45-46].

2. *To integrate mental health into the nation's primary care system and decentralise specialist mental health services:* Federal Ministry of Health through the National Primary Health Care Development Agency, communities and the National Health Insurance Scheme. The National Primary Health Care Development Agency is the federal agency primarily responsible for developing programmes, policies, and structural frameworks to guide the activities of State Primary Healthcare Development Agencies. The State Primary Healthcare Development Agencies are the state government agencies responsible for health services delivery, including mental health at the PHC level, and therefore necessary actors in this response. The National Health Insurance Scheme, as the government agency managing the health insurance scheme in the country, is critical to ensuring the minimum package of care includes essential mental health services. Engaging and training community volunteer health workers will further strengthen the response.

3. *To strengthen existing systems and develop new human resource development, information, and communication strategies:* Federal Ministry of Health through the Medical and Dental Council of Nigeria (MDCN), National Postgraduate Medical College of Nigeria (NPMCN), Nigerian Institute of Medical Research (NIMR), Nursing and Midwifery Council of Nigeria (NMCN), and Federal teaching hospitals (FTHs). MDCN is responsible for regulating medical training in Nigeria and, therefore, a necessary player in the achievement of adequate inclusion of mental health knowledge in the medical training curriculum. NPMCN is responsible for the post-graduate training of medical doctors in mental health and other disciplines. NMCN is responsible for regulating similar training for nurses and midwives. FTHs are responsible for training all cadre staff within the primary care system. NUC under the FME regulates university education in Nigeria and is therefore critical in incorporating mental health knowledge into the educational system curriculum. The NIMR is responsible for coordinating local research in mental health and disseminating the findings [47]. The missing actors here are National Assembly, State House of Assemblies, federal and state ministries of finance, budget, and

planning. They must be more actively engaged in obtaining the budgetary and legislative commitments to achieve this objective [47-49].

4. *To strengthen the management of mental health services:* Federal Ministry of Health. The Federal Ministry of Health will coordinate the process through the Mental Health Action Committee to provide the structural framework and supervise the strengthening process across the country. The missing actors here are National Assembly. The National Assembly should be more involved as the government arm responsible for providing legislation to structure the management and leadership of mental health services delivery in Nigeria [45-46]. The State House of Assemblies and this is due to federalism, the state-level legislature should also be engaged adequately to adapt and make similar legislation at the state level for the response to be holistic and practical [45][50].

5. *To encourage intersectoral collaboration with other related Governmental Agencies (GAs) and Non-governmental Organisations:* Relevant government ministries, agencies, departments, Non-governmental Organisations providing mental health services, religious leaders, and traditional healers. Collaboration among these key actors is necessary to achieve a coordinated and successful national and local response. Equivalent state government ministries to achieve an adequate response at the state and local levels.

6. *To integrate mental health education with educational programmes in schools:* Federal Ministry of Health. The Federal Ministry of Health will engage relevant stakeholders to ensure that the mental health modules are included in the school's curriculum through the Mental Health Action Committee. Federal Ministry of Education. As the government Ministry, Department or Agency, i.e. responsible for the regulation of schools and the design of curriculum at primary, secondary and tertiary levels, this ministry should be involved more actively to achieve this response [45][51].

7. *To ensure social and educational inclusion of people with intellectual disabilities and that special attention is paid to women, children, the elderly, detainees, prisoners, and refugees:* Federal Ministry of Health via the Mental Health Action Committee. The Mental Health Action Committee is responsible for developing a mental health bill in collaboration with other stakeholders, mainly the National Assembly. In this regard, the missing actors are State House of Assemblies. The state legislative apparatus must be actively engaged to achieve the passage of similar bills at the state level to enforce and protect the rights of the vulnerable and disadvantaged population at the local level [45][52]. The families and carers of the mentally challenged should be involved more as critical stakeholders in the development of legislation [35].

8. *To promote the understanding of mental health in communities:* Federal Ministry of Health via the Mental Health Action Committee. The Mental Health Action Committee is responsible for developing and securing legislation and policy to enforce mental health promotion activities in communities, e.g., an alcohol/substance sales regulation policy and community-based and mass media campaigns.

9. *To monitor trends, and determinants, ensure surveillance of mental health:* Federal Ministry of Health will conduct the nationwide survey on mental health, integrate the information into the country's HIS and monitor and evaluate any progress.

***Assessment of the effectiveness of the Nigerian health system responses to mental health***

Nigeria's health system's response to mental health has been described as ineffective, uncoordinated, poorly legislated and financed [26][32]. A study in 2012 comparing the successes of the Nigerian and South African mental health systems responses using the WHO Assessment Instrument for Mental Health Systems has identified that Nigeria is significantly lagging in all the six domains considered (policy and legislative framework, mental health services, mental health in primary care, human resources, public information, and links with other sectors, monitoring and research). Additionally, the insufficient progress in integrating mental health into primary care has been noted to be of great concern [32][44]. Similarly, morbidity and mortality statistics for mental health in the country have indicated that overall, only a little progress was made over the last three decades of implementing the national response. Only the morbidity burden among the Women of Reproductive Age group has significantly reduced. However, most of the little successes recorded are being reversed by the ongoing insurgency, banditry, and displacement of the population that started around 2010 [45-46]. The figures below highlight the trend in mental health mortality and morbidity data over Nigeria's three decades of implementing a mental health policy response. An area of note is the increase in the incidence and prevalence rates and DALYs of mental disorders from 2015, reflecting the result of the country's political instability and insecurity [53][55].
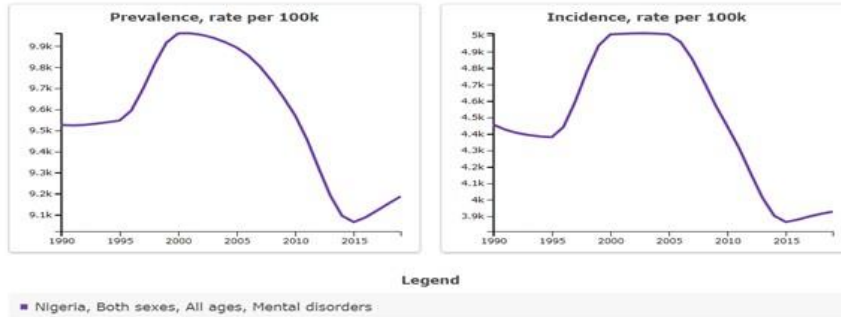
**Figure 2: Minor Improvement in the prevalence and incidence rates of mental health in Nigeria.**
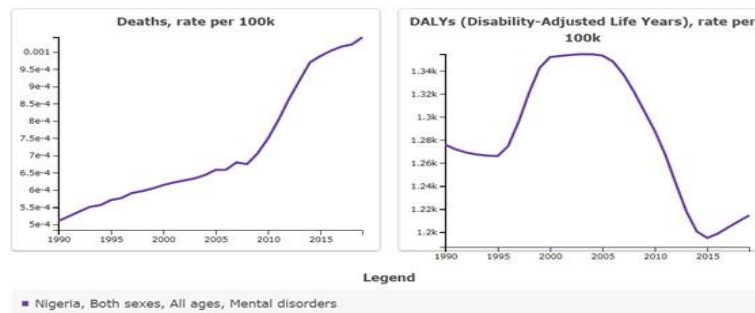*Source: IHME 2019*



**Figure 3: The Changes in Mental Health Mortality and DALYs in Nigeria over the last three decades.**
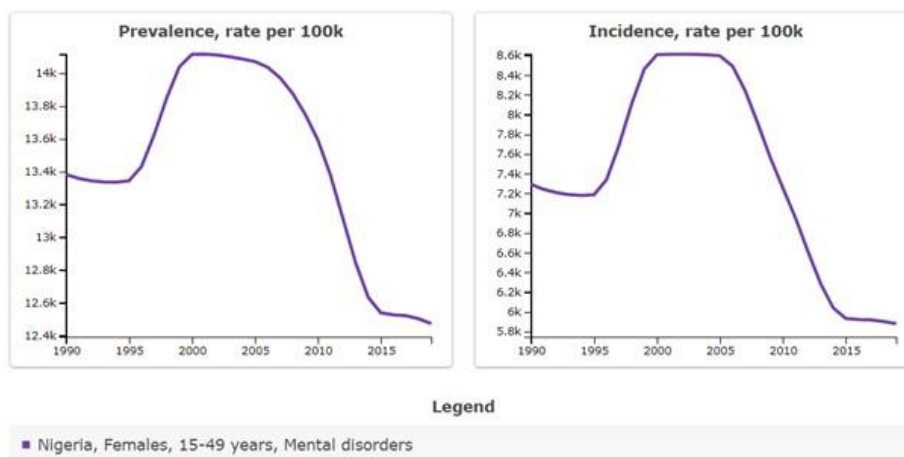*Source: IHME 2019*



**Figure 4: The Reduction in the prevalence rates and incidence rates of Mental Health among Women of Reproductive Age over the last three decades.**
*Source: IHME 2019*

It can be concluded that the mental health response in Nigeria has been largely ineffective. The policy and legislation must be reviewed to reflect current realities and involve more critical actors in the response.

*How well does the Nigerian health system incorporate 'rights' into its mental health response?*

The WHO constitution [56] emphasised the attainment of the highest standard of health as a fundamental human right. The organisation reiterated that the rights-based approach to health could only be achieved through health policy and system programmes prioritising equity [57]. The rights of individuals with mental health conditions are one of the primary considerations of the national response to mental health services delivery in Nigeria. This was highlighted in the vision of the policy that "The Government and people of Nigeria hereby reaffirm that health, including mental well-being, is the inalienable right of every Nigerian, and that mental, neurological and substance abuse (MNS) care shall be made available to all citizens within the national health system at the level of primary health care (PHC) and in communities" [46]. Additionally, the mission of the policy response indicated that individuals with mental health conditions are entitled to the same rights of treatment and support, which shall be close to their homes and communities as possible, and the need for them to live free from discrimination and social isolation on account of their condition [35].

To protect the rights of people with mental health conditions, one of the critical strategies of the national policy is the collaboration with the judiciary, police, armed forces, prisons, schools, religious leaders, traditional healers, employers, and Non-governmental Organisations to improve their knowledge of mental health and human rights and to incorporate mental health education in their various training curricula. Another critical policy strategy was reviewing the current training curriculum and continuous professional development programmes for mental health workers to improve their knowledge and sensitivity to the rights of people with mental health conditions [35]. Additionally, the NMSAP has attempted to incorporate these rights by aiming to ensure a repeal of the lunacy act of 1958, which promotes stigmatisation, discrimination, and abuse of the rights of individuals with mental health disorders. The lunacy act is to be replaced by a more evidence-informed law based on mental health principles and rights by 2019. However, due to the limited awareness, knowledge, and support for mental health in the country, the proposed mental health, neurological disorders, and substance abuse bill 2019 has received limited support. It is yet to be passed into law [47].

The available literature indicates that only the Lagos and Ekiti states of Nigeria have passed a mental health bill highlighting the rights of individuals with mental health challenges and specific sanctions for those found guilty of abusing those rights [50][52].

In conclusion, while the health system and policy have done well to incorporate these rights, the absence of appropriate legislation to protect these rights has made the response to these rights ineffective [47][58-59].

## CONCLUSION

Mental health is a public health emergency in Nigeria that receives little attention. Factors including other national priorities, health emergencies, such as the Covid-19 pandemic, war on insurgency and militancy, poor funding, poor surveillance and data, low levels of awareness and support for mental health programmes, and weak legislation, pose a severe threat to a reasonable and practical response. Therefore, there is an urgent need to pass the drafted mental health bill into law and review the 2013 national mental health service delivery policy.

## REFERENCES

1. Dahlgren G, Whitehead M. The Dahlgren-Whitehead model of health determinants: 30 years on and still chasing rainbows. Public health. 2021 Oct 1;199:20-4.
2. Idowu OM, Adaramola OG, Aderounmu BS, Olugbamigbe ID, Dada OE, Osifeso AC, Ogunnubi OP, Odukoya OO. A gender comparison of psychological distress among medical students in Nigeria during the Coronavirus pandemic: A cross-sectional survey. African Health Sciences. 2022 Apr 29;22(1):541-0.
3. Afolabi MO, Abioye-Kuteyi EA, Fatoye FO, Bello IS, Adewuya AO. Pattern of depression among patients in a Nigerian family practice population. South African Family Practice. 2008 May 21;50(2):63-.
4. Adewuya AO, Atilola O, Ola BA, Coker OA, Zachariah MP, Olugbile O, Fasawe A, Idris O. Current prevalence, comorbidity and associated factors for symptoms of depression and generalised anxiety in the Lagos State Mental Health Survey (LSMHS), Nigeria. Comprehensive Psychiatry. 2018 Feb 1;81:60-5.
5. Egbe CO, Dakum PS, Ekong E, Kohrt BA, Minto JG, Ticao CJ. Depression, suicidality, and alcohol use disorder among people living with HIV/AIDS in Nigeria. BMC public health. 2017 Dec;17:1-3.
6. Obadeji A, Oluwole L, Dada M, Oshatimi M. Alcohol use and psychological wellbeing of health workers in a Nigerian Hospital: An exploratory study. Malawi Medical Journal. 2018 Mar 28;30(1):31-6.

7. Igwe WC, Ojinnaka NC. Mental health of adolescents who abuse psychoactive substances in Enugu, Nigeria-A cross-sectional study. Italian journal of pediatrics. 2010 Dec;36:1-5.

8. Ayamolowo SJ, Olajubu AO, Akintola FE. Perceived social support and depression among pregnant and child-rearing teenagers in Ile-Ife, Southwest Nigeria. African Journal of Midwifery and Women's Health. 2019 Oct 2;13(4):1-9.

9. Abiodun O, Sodeinde K, Imhonopi G, Omotosho A, Amaike C. Social isolation is associated with major depressive disorders among women accessing HIV/AIDS care in Nigeria. AIDS care. 2022 Jun 3;34(6):741-5.

10. Andersen I, Rossi R, Nyamkume PK, Hubloue I. Mental health and psychosocial support for the war-wounded: A retrospective cohort study from the Democratic Republic of Congo, Mali and Nigeria. PLoS one. 2022 May 24;17(5):e0268737.

11. Obimakinde AM, Omigbodun O, Adejumo O, Adedokun B. Parenting styles and socio-demographic dynamics associated with mental health of in-school adolescents in Ibadan, south-west Nigeria. Journal of Child & Adolescent Mental Health. 2019 Aug 1;31(2):109-24.

12. Cheng Y, Li X, Lou C, Sonenstein FL, Kalamar A, Jejeebhoy S, Delany-Moretlwe S, Brahmbhatt H, Olumide AO, Ojengbede O. The association between social support and mental health among vulnerable adolescents in five cities: findings from the study of the well-being of adolescents in vulnerable environments. Journal of Adolescent Health. 2014 Dec 1;55(6):S31-8.

13. Agbaje OS, Nnaji CP, Nwagu EN, Iweama CN, Umoke PC, Ozoemena LE, Abba CC. Adverse childhood experiences and psychological distress among higher education students in Southeast Nigeria: an institutional-based cross-sectional study. Archives of Public Health. 2021 Apr 29;79(1):62.

14. Sekoni O, Mall S, Christofides N. Prevalence and factors associated with PTSD among female urban slum dwellers in Ibadan, Nigeria: a cross-sectional study. BMC public health. 2021 Dec;21:1-3.

15. Oladeji BD, Makanjuola VA, Gureje O. Family-related adverse childhood experiences as risk factors for psychiatric disorders in Nigeria. The British Journal of Psychiatry. 2010 Mar;196(3):186-91.

16. Gureje O, Kola L, Uwakwe R, Udofia O, Wakil A, Afolabi E. The profile and risks of suicidal behaviours in the Nigerian Survey of Mental Health and Well-Being. Psychological medicine. 2007 Jun;37(6):821-30.

17. Issa BA, Yussuf AD, Ajiboye PO, Buhari OI. Prevalence of psychiatric morbidity among inmates of a borstal institution in Nigeria. International journal of prisoner health. 2009 Feb 1;5(2):88-94.

18. Osasona SO, Koleoso ON. Prevalence and correlates of depression and anxiety disorder in a sample of inmates in a Nigerian prison. The International Journal of Psychiatry in Medicine. 2015 Aug;50(2):203-18.

19. Lasisi MD, Nuhu FT, Adebayo F, Eseigbe EE, Sheikh TL. Spectrum and predictors of suicidal risk among incarcerated youth in a correctional facility in Kaduna, northern Nigeria. Vulnerable children and youth studies. 2022 Apr 3;17(2):147-58.

20. Atilola O, Ola B, Abiri G, Sahid-Adebambo M, Odukoya O, Adewuya A, Coker O, Folarin O, Fasawe A. Status of mental-health services for adolescents with psychiatric morbidity in youth correctional institutions in Lagos. Journal of Child & Adolescent Mental Health. 2017 May 31;29(1):63-83.

21. Armiyau AY. A review of stigma and mental illness in Nigeria. J Clin Case Rep. 2015;5(1):1000488.

22. Mapayi B, Makanjuola RO, Mosaku SK, Adewuya OA, Afolabi O, Aloba OO, Akinsulore A. Impact of intimate partner violence on anxiety and depression amongst women in Ile-Ife, Nigeria. Archives of women's mental health. 2013 Feb;16:11-8.

23. Jidong DE, Ike TJ, Tribe R, Tunariu AD, Rohleder P, Mackenzie A. Berom cultural beliefs and attitudes towards mental health problems in Nigeria: a mixed-methods study. Mental Health, Religion & Culture. 2022 May 28;25(5):504-18.

24. Ikwuka U, Galbraith N, Nyatanga L. Causal attribution of mental illness in south-eastern Nigeria. International Journal of Social Psychiatry. 2014 May;60(3):274-9.

25. Osasona SO, Koleoso ON. Socio-economic status and the risk of mental morbidity: A cross sectional study of two socio-economically dissimilar Nigerian communities". Journal of Medicine and Biomedical Research. 2015 Oct 29;14(1):82-94.

26. Anyebe EE, Abubakar FU, Garba SN, Murtala HH, Igbinlade AS. The Role of Non-Governmental Organisations (NGOs) in Community-based Mental Health Services in Northern Nigeria: Prospects and Challenges.

27. Bello S, Asuzu MC, Ofili AN. Job satisfaction and psychological health of medical doctors in Calabar, southern Nigeria. East African medical journal. 2013;90(6):189-94.

28. Nwosu AD, Ossai EN, Mba UC, Anikwe I, Ewah R, Obande BO, Achor JU. Physician burnout in Nigeria: a multicentre, cross-sectional study. BMC Health Services Research. 2020 Dec;20:1-9.

29. Olanrewaju MK. Predictive influence of job stress on mental health and work behaviour of nurses in the University College Hospital, Ibadan, Oyo State, Nigeria. Research on Humanities and Social Sciences. 2015 Jul 15;11:31-8.

30. Okulate GT, Jones OB. Post-traumatic stress disorder, survivor guilt and substance use-a study of hospitalised Nigerian army veterans. South African Medical Journal. 2006 Feb 1;96(2):144-6.

31. Adibe MO, Ubaka CM, Igboeli NU, Abraham-Igwe KA. Effect of Occupational Factors on the Quality of Life of Workers in Governmental and Non-Governmental Sectors in Southeastern Nigeria. Tropical journal of pharmaceutical research. 2014 Feb 25;13(2):287-93.

32. Jack-Ide IO, Uys L. Barriers to mental health services utilization in the Niger Delta region of Nigeria: service users' perspectives. The Pan African Medical Journal. 2013;14.

33. Sorsdahl K, Stein DJ, Grimsrud A, Seedat S, Flisher AJ, Williams DR, Myer L. Traditional healers in the treatment of common mental disorders in South Africa. The Journal of nervous and mental disease. 2009 Jun 1;197(6):434-41.

34. Burns JK, Tomita A. Traditional and religious healers in the pathway to care for people with mental disorders in Africa: a systematic review and meta-analysis. Social psychiatry and psychiatric epidemiology. 2015 Jun;50:867-77.

35. FMH. National Policy for Mental Health Services Delivery Nigeria (Unpublished) Abuja: Nigeria. 2013.

36. Uwakwe R, Oladeji BD, Gureje O. Traumatic events and suicidal behaviour in the Nigerian Survey of Mental Health and Well-Being. Acta psychiatrica scandinavica. 2012 Dec;126(6):458-66.

37. Adeboye AO. Addressing the Boko Haram-induced mental health burden in Nigeria. Health and Human Rights. 2021 Jun;23(1):71.

38. Kaiser BN, Ticao C, Boglosa J, Minto J, Chikwiramadara C, Tucker M, Kohrt BA. Mental health and psychosocial support needs among people displaced by Boko Haram in Nigeria. Global public health. 2020 Mar 3;15(3):358-71.

39. Audu IA, Idris SH, Olisah VO, Sheikh TL. Stigmatization of people with mental illness among inhabitants of a rural community in northern Nigeria. International Journal of Social Psychiatry. 2013 Feb;59(1):55-60.

40. Haruna MA. The problems of living with disability in Nigeria. JL Pol'y & Globalization. 2017;65:103.

41. Ibeziako PI, Omigbodun OO, Bella TT. Assessment of need for a school-based mental health programme in Nigeria: Perspectives of school administrators. International Review of Psychiatry. 2008 Jan 1;20(3):271-80.

42. Wang PS, Aguilar-Gaxiola S, Alonso J, Angermeyer MC, Borges G, Bromet EJ, Bruffaerts R, De Girolamo G, De Graaf R, Gureje O, Haro JM. Use of mental health services for anxiety, mood, and substance disorders in 17 countries in the WHO world mental health surveys. The Lancet. 2007 Sep 8;370(9590):841-50.

43. Esu BB, Inyang BJ. Impacts of the global economic crisis on the consumption of Psychiatric Nursing Services in Nigeria. Journal of Health Management. 2011 Sep;13(3):241-57.

44. FMH. National Multi-Sectoral Action Plan for the Prevention and Control of Non-Communicable Diseases (2019 – 2025). 2019.

45. FMJ. Constitution of the Federal Republic of Nigeria (Unpublished). Abuja: Nigeria. 1999.

46. Ugochukwu O, Mbaezue N, Lawal SA, Azubogu C, Sheikh TL, Vallières F. The time is now: reforming Nigeria's outdated mental health laws. The Lancet Global Health. 2020 Aug 1;8(8):e989-90.

47. NIMR. (2022). [Online]. Available from: nimr.gov.ng

48. Nwefoh E, Aguocha CM, Ryan G, Ode P, Ighagbon FO, Akinjola O, Omoi S, Abdulmalik J, Agbir TM, Obekpa O, Ogbole S. Depression and experience of incarceration in North Central Nigeria: a situation analysis at Makurdi medium security prison. International Journal of Mental Health Systems. 2020 Dec;14:1-3.

49. Wada YH, Rajwani L, Anyam E, Karikari E, Njikizana M, Srour L, Khalid GM. Mental health in Nigeria: a neglected issue in public health. Public Health in Practice. 2021 Nov 1;2:100166.

50. LSG. Lagos State Mental Health Law. (2018) Ikeja: Lagos State Government.

51. Atilola O, Ola B. Towards school mental health programmes in Nigeria: systematic review revealed the need for contextualised and culturally-nuanced research. Journal of Child & Adolescent Mental Health. 2016 Apr 29;28(1):47-70.
52. ESG. Ekiti State Mental Health Law 2021. (2021) Ekiti: Ekiti State Government.
53. IHME. Global burden of Diseases. Institute for Health Metrics and Evaluation [Online]. 2019. Available from: vizhub.healthdata.org/gbd-results/
54. Adesina MA, Adesanya T, Olufadewa II. Mental health and conflict in Nigeria: an overview. Eur J Environ Public Health. 2020;4(1):em0038.
55. Mohammed K. The Origins of Boko Haram. Oxford Academic Publications. 2018.
56. World Health Organization. Constitution of the world health organization. 1995.
57. World Health Organization. Human Rights and Health Fact sheet. 2017. Available from: www.who.int/news-room/fact-sheets/detail/human-rights-and-health
58. Olagunju AT, Oluwaniyi SO, Fadipe B, Ogunnubi OP, Oni OD, Aina OF, Chaimowitz GA. Mental health services in Nigerian prisons: Lessons from a four-year review and the literature. International Journal of Law and Psychiatry. 2018 May 1;58:79-86.
59. Nwefoh E, Aguocha CM, Ryan G, Ode P, Ighagbon FO, Akinjola O, Omoi S, Abdulmalik J, Agbir TM, Obekpa O, Ogbole S. Depression and experience of incarceration in North Central Nigeria: a situation analysis at Makurdi medium security prison. International Journal of Mental Health Systems. 2020 Dec;14:1-3.