

Barriers and Attitudes Towards Mental Health Services in Nigeria: A Systematic Review.

Abstract

Mental health services in Nigeria consists mainly of large government psychiatric hospitals. There are eight Neuropsychiatric hospitals and a similar number of teaching hospital psychiatric departments for a population of 200 million people. There is only one private community residential facility available with ten beds in Lagos State and it is administered by a religious organization for rehabilitation of persons with drug problems. In Nigeria, an estimated 20-30% of the population are believed to suffer from mental disorders. MEDLINE EntrezPubmed search was done in November, 2018. Studies conducted on mental health and mental health services in Nigeria done from 2009 till date were selected for review. The studies were grouped into two categories according to the key words used in the search. **Category 1:** Keywords used in the search: mental health, Nigeria. This search yielded a total of one thousand and fifty (1,051) publications. **Category 2:** Keywords used in the search: mental health services, Nigeria. Lack of incentives for health care workers and inadequate workforce were identified as some of the barriers against the use of mental health services in Nigeria. Other major barriers identified were- poor education, ignorance, and stigmatization. Absence of services in rural communities, waiting time at the facilities, bureaucracy in treatment and poor information management, high cost of service, travel distance, feelings of shame and loss of productive income were the barriers identified in some other studies conducted in Nigeria.

Keywords: “mental health Nigeria”, “mental health services AND Nigeria”, psychiatric hospitals.

1.1 Background.

Mental Health disorders are not uncommon, and the global burden of mental illness in 2019 stood at 970 million is projected at 15% the year 2020 (1,2). In Nigeria, an estimated 20-30% of the population are believed to suffer from mental disorders (3,4). Effective and optimally functional health systems should deliver high-quality services to all persons, whenever and wherever they need such services (5,6). The attainment of the world's goal of universal health coverage (UHC) is predicated on achieving improvements in health status, equitable access to health care, fair financing, service quality and human rights protection. The

accomplishment of the universal health coverage is a critically imperative goal for strengthening health system as well as an explicit target for the sustainable development goals (SDGs) which are hallmarks in the principle of not leaving anyone behind (5). It therefore, follows that the low and medium income countries of the world suffer from the two-pronged challenges of diminished service coverage as well as limited financial protection for mental, neurological, and substance use (MNS) disorders. This is an extra burden to pronounced harsh socio-economic fall outs for a number households in the country (7,8). The extraordinary link between mental illness and poverty has been widely studied in developed countries all over the world. The impact on the quality of life, increased economic burden of care, and reduced productivity, have all ultimately reinforced poverty (9,10)

The 2006 WHO-AIMS report on mental health systems in Nigeria showed that there is considerable neglect of mental health in the country. The existing mental health policy document was formulated in 1991. Only 4% of government health budget is earmarked for mental health (11,12). It also revealed other issues related to mental health. These include, unavailability of essential medicines at health centers, unavailability of Physicians to run primary health care centers and the lack of restrictions to the prescription of psychotropic medications. It also identified that there are only a few nongovernmental organizations involved in individual assistance activities such as counseling, housing, or support groups (13,14,15).

Mental health services in Nigeria consists mainly of large government psychiatric hospitals. There are eight Neuropsychiatric hospitals and a similar number of teaching hospital psychiatric departments for a population of 170 million people (16,17). There is only one private community

residential facility available with ten beds in Lagos State and it is administered by a religious organization for rehabilitation of persons with drug problems (12,13).

As with the other countries in sub-Saharan Africa, mental health care is neglected and neuropsychiatric services receive low priority in the national budget allocations (18). In Nigeria, less than 20% of persons with mental disorders receive treatment, of whom only 10% maintain follow-up treatment over a period of twelve months (19). Nigeria has a ratio of mental health bed of 0.4% per 100,000 persons, 4 Psychiatric nurses per 100,000 persons, 0.09 Psychiatrists and 0.02 Psychologists and social workers per 100,000 persons and a total public health expenditure of 5% of the country's budget (20).

The lack of appropriate legislation in Nigeria has caused their mental health services to remain inequitable, which violates the principles of the primary health care system and essentially provides a vertical rather than an integrated service. There is gross information gap which makes it difficult to identify areas of need, to make informed decision about policy direction, and or monitor progress. The consequence of this information gap is the continued neglect of mental health issues and the many unmet needs for service that exist for mental health problems in the community (12).

Most low and middle income countries do not have mental health legislation or policies to direct relevant programmes, lack appropriately trained mental health personnel and are constrained by the prevailing public health priority agenda and its effect on funding. Other challenges include, the complexity of and resistance to decentralization of mental health services; scarce mental health resources and a mental health budget less than 1% of the total health budget, stigma and discrimination (21).

Efforts to reduce the treatment gap through the integration of mental health into the primary care and the utilization of the WHO initiatives such as the Mental Health Gap Action Programme Intervention Guide (mhGAP-IG), for training non specialists using a task-sharing approach requires an enabling policy and health system framework for it to succeed (14,22).

Several barriers militate against the improvement of mental health system in low and middle income countries, and these are not limited merely to paucity of both human and material resources, but also include overarching health governance bottlenecks (16,2).

In 2010, Nigeria was selected as one of the countries for the adoption of the simplified diagnosis and treatment guideline developed and launched by the WHO, 2008. The initiative focused on early detection and management of common mental health disorders such as depression, alcohol and substance use disorders and epilepsy in the primary health care settings. At present, government services are provided mainly in large tertiary institutions (Federal Neuropsychiatric hospitals) and university teaching hospital psychiatric departments. Some states have psychiatric hospitals and some Federal medical centers (FMC) have psychiatric departments. The focus of all these services is in the large cities, which makes access to care difficult for the majority of the population (24).

1.2 National Policy for Mental Health Services Delivery.

This policy was developed in 2013 through collaborative process which included a wide range of stakeholders in mental health in Nigeria. In 1991, the Federal Government of Nigeria adopted a health policy which placed provisions on mental health services at the primary health care level. This current policy updates the 1991 policy and reaffirms this commitment to the provision of

quality services that are accessible to most people in the country. Neuropsychiatric and substance abuse disorders have a major impact on quality of life as well as social and economic viability of families, communities and the nation.

They are common with around one person in five experiencing a significant problem in their lifetime. Many are also chronic, requiring long term commitment to treatment. As a result, they are an important cause of disability estimated by the WHO to comprise 14% of all disability- the largest single group among non-communicable diseases.

There are less than 150 psychiatrists in the country (around 1 per 1 million population) and a very few Neurologists with many newly trained specialists leaving the country to work abroad. There around 5 psychiatric nurses per 100,000 population and only very few other mental and neurological health professionals like clinical psychologists and social workers, neurophysiotherapists, and occupational therapists.

1.2.1 The vision of the policy.

The Government and people of Nigeria hereby affirm 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 the communities

1.2.2 The mission of the policy.

The Federal, state and local governments of Nigeria are hereby committed to pursue the following declarations:

- The MNS policy shall be based on the national philosophy of social justice and equity.
- Individuals with mental, neurological and substance use (MNS) disorders shall have the same rights to treatment and support as those with physical illness and shall be treated in health facilities as close as possible to their communities.
- No person shall suffer discrimination that compromises their ability to fully participate in community life on account of mental or neurological illness.
- At all levels of health care, MNS services shall as far as possible be integrated with general health services. In this way the preventive, therapeutic, rehabilitative and social re-integration aspects of MNS care shall as much as possible be available to all Nigerians.
- To achieve a comprehensive coverage of the population, delivery of MNS care shall be firmly established in the PHC setting and any other setting considered appropriate. The services shall be promoted by all health care personnel with active participation of members of the community.
- Appropriate training in MNS and psycho-social skills and positive attitude towards the mentally ill shall be provided to all health care personnel. This shall be facilitated by the provision of adequate teaching aids.
- Intersectoral collaboration shall be fostered among those involved in the overall national development of quality of life. These include social development, Agriculture, education, science and technology, housing, environmental protection, communication and others. The attainment of Sustainable Development Goals (SDGs) depends to a large extent on the MNS

and mental capita of the populace. Collaboration with the office of the special adviser to the president on SDGs will be a particularly crucial one.

- Healthy attitudes and positive socio-cultural attributes in the population, particularly among youths, shall be promoted to prevent aberrant behavior with adverse consequences for MNS.
- To eliminate social stigma often associated with mental disorders, encouragement shall be given to the promotion of positive attitudes towards the mentally ill among the general population. Government shall work to inform the public about the nature, causes and treatability of mental disorders. Government will promote the integration of MNS services into every tier of health service delivery, in particular the general and specialist hospitals, and into programmes addressing physical health delivery (with which MNS is intricately associated).
- Alcohol and drug abuse and their associated problems shall be reduced to the barest minimum by the use of appropriate preventive, therapeutic and rehabilitative measures.
- Special care shall be provided for the vulnerable and disadvantaged members of the community such as, children, women, the elderly, detainees and prisoners and refugees.
- Non-governmental organizations (NGOs) shall be encouraged to assist in the promotion of MNS as well as in the preventive and rehabilitative aspects of the MNS care services,
- There should be collaboration with all international organizations whose objectives and programs include aspect of mental, psycho-social, neurological as well as alcohol and drug abuse problems.
- There shall be periodic review of legislation governing the care of the mentally in consonance with the advances in the field of MNS.

- Strengthen the evidence base for mental and neurological care by vigorously encouraging and funding research programs aimed at enhancing our understanding of the risk factors and consequences of MNS mental disorders in Nigeria; and the development and implementation of effective interventions.
- The necessary human resources to support the achievement of these goals will be developed. This will include the production and retention of specialists as well as general clinicians in numbers adequate to address the burden of mental, neurological and substance use disorders in Nigeria. Trained professionals require a career pathway in order to be attracted to these specialties, and retained.
- The outlined details of programmes on this policy declaration are contained in a separate document titled “The National MNS Programme and Action for Nigeria.

REVIEW METHODS.

2.1 Study design.

The study design is a systematic review of primary research studies done in Nigeria.

2.2 Study population.

Published studies on mental health and mental health services in Nigeria.

2.3 Inclusion criteria.

- The study must be a primary research and not a review article.
- The study must be one done in Nigeria from the year 2009 till date.
- Studies that measured the barriers to mental health services and perception/attitudes of mental health workers towards the mentally ill in Nigeria.

2.4 Exclusion criteria.

- Studies not published in English language.
- Studies not published in PubMed.

2.5 Data collection method.

MEDLINE EntrezPubmed search was done in November, 2018. Studies conducted on mental health and mental health services in Nigeria done from 2009 till date were selected for review. The studies were grouped into two categories according to the key words used in the search.

Category 1: Keywords used in the search---- mental health,Nigeria, mental health systems.

This search yielded a total of one thousand and fifty (1,051) publications.

Category 2: Keywords used in the search----- mental health services,Nigeria, global health care.

This search yielded a total of five hundred and twenty seven (527) publications.

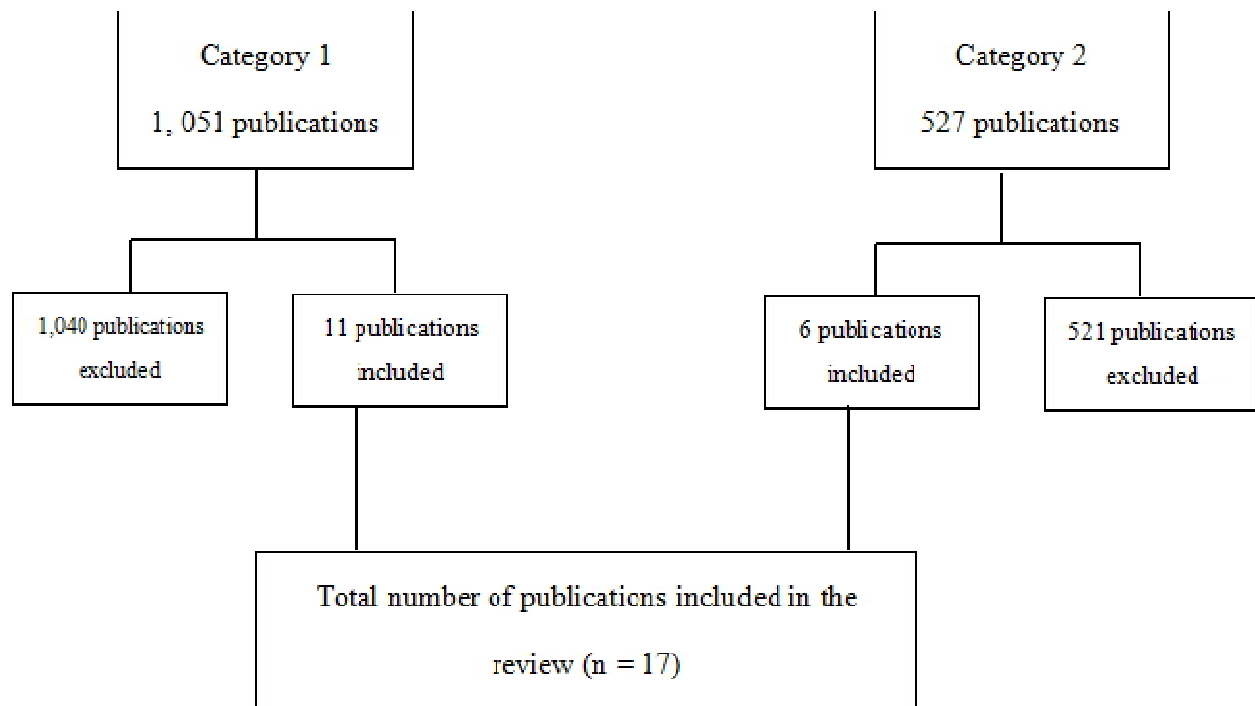
The 1,051 publications in the category 1 group were subjected to the inclusion and exclusion criteria process and 11 studies were included and 1,040 publications were excluded. Six (6)

publications that met the inclusion criteria were included for the review while five hundred and twenty one (521) were excluded from the review.

The eventual number of publications included for the review came to a total of seventeen (17).

Figure one below shows the Flowchart for the selection of publications used in the review

Figure 1;



RESULTS.

The seventeen studies that met the inclusion criteria were selected for this review. These studies provided sufficient information on the barriers to the use of mental health services in Nigeria and the attitudes of mental health care workers towards the people living with mental disorders in Nigeria.

3.1 Barriers to the use of mental health services in Nigeria.

A total of nine (9) studies provided information on the barriers to the use of mental health services in Nigeria. These studies were conducted in Kaduna state, Gombe state, Delta state, Ogun state, Ebonyi state, Abia state, Imo state, and Bayelsa state.

Table 1: Summary of the studies that investigated the barriers to the use of mental health services in Nigeria.

| S/N | Author/Year | Study location | Study methods | Primary study subjects | Identified barriers. | Implications for policy. |
|------------|----------------------------|------------------------------|----------------------|--|--|--|
| 1 | Suleiman, 2016. | Kaduna state | Cross sectional | Mental health professionals | Lack of incentives and inadequate workforce | More funds should be made available by government to enhance human resources and incentives for workers |
| 2 | Audu et.al, 2013. | Gombe state | Cross sectional | Healthy adults in rural areas | Gross ignorance and stigmatization | Public enlightenment campaigns by the ministry of health should be intensified. |
| 3. | Oweileyefa et.al, 2017. | Delta state | Cross sectional | Health workers and community respondents | Beliefs about the causation of mental illness, poor access to treatment, stigma, poor finances | Health education by the information department of the ministry of health and provision of incentives for clients |
| 4. | Olawande et.al, 2013. | Ogun state | Cross sectional | People living with mental disorders. | Poor finances and distance from health facilities | The federal government should site more psychiatric hospitals in the rural communities. |
| 5. | Oyewunmi et.al, 2015. | Ogun state | C/S. | Community respondents | Misconceptions about mental illness and illiteracy. | Education for the community to improve awareness on mental health. |
| 6. | Eaton et.al, 2017. | Ebonyi, Abia and Imo states. | C/S. | Village health workers | Bureaucracy in treatment and poor information management. | Improved information dissemination and simplified treatment protocols should be ensured by the FMOH. |
| 7. | Aliyu et.al, 2016. | Kaduna state | C/S. | Mental health nurses. | Poor incentives for nurses and inadequate staffing | Improved human resources and salary by the government |
| 8. | Sheikh et.al, 2015. | Kaduna state | C/S. | University employees. | Stigmatization among workers | Education on mental health is needed. |
| 9. | Izibeloko and Leana, 2013. | Bayelsa state | C/S. | Caregivers and clients. | Absence of services in rural communities, long waiting time at | More education on mental health services by the FMOH and increased human |

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|--|--|--|--|--|---|--|
| | | | | | facility, stigma discrimination, poor knowledge of mental health services, high cost of service | resources to enhance quick service delivery at the facilities by the federal government. |
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Lack of incentives for health care workers and inadequate workforce were identified as some of the barriers against the use of mental health services in Nigeria (25,26). Other major barriers identified were- poor education, ignorance, and stigmatization (27,28,29,30,31).

Other studies misconceptions, poor access to treatment facilities and poor finances as the barriers to the use of mental health services by people living with mental disorders in Nigeria (30,32).

Absence of services in rural communities, waiting time at the facilities, bureaucracy in treatment and poor information management, high cost of service, travel distance, feelings of shame and loss of productive income were the barriers identified in some other studies conducted in Nigeria (17,29).

Attitudes of health workers towards the people living with mental disorders in in Nigeria

Table 2 below shows the summary of studies that investigated the attitudes of mental health care workers towards people living with mental disorders in Nigeria.

A total of eight (8) studies provided adequate information on the attitude of health care workers towards the mentally ill in Nigeria. These studies were conducted in Osun state, Delta state, Enugu state, Lagos state, Edo state, Kano state, and Benue state.

Some of the studies showed that some mental health care workers had benevolent and positive attitudes toward people with mental disorders (33,34).

Negative attitudes, including stigmatization were also discovered in other studies done in Nigeria (35,36,37,38). Another study showed that deep-rooted cultural beliefs and traditional social acts to dislike the mentally ill were identified in some mental health care workers in the country (39).

TABLE 2: A summary of the studies that investigated the attitudes of mental health care workers towards the mentally ill in Nigeria.

| S/N | Author/Year. | Study Location | Study methods | Primary study subjects | General attitudes/perception | Implications for Policy |
|-----|-------------------------------|----------------|-----------------|--|--|--|
| 1. | Mosakor and Wallyahmed, 2017. | Osun state | Cross sectional | Primary health care workers | Benevolent attitudes towards the mentally ill. | This should be fostered by the ministry of health |
| 2. | Ewruhadjakpor, 2009. | Delta state | C/S. | Health care workers | Deep-rooted cultural beliefs and traditional social acts to dislike the mentally ill. | Information department of the ministry of health should do more enlightenment workshops. |
| 3. | Ubaka et.al, 2018 | Enugu state | C/S. | Doctors, nurses and pharmacists. | Attitudes were non-stigmatizing, however, were significantly higher in doctors and pharmacists than nurses. | Same as above |
| 4. | Coker et.al, 2018. | Lagos state | C/S. | Nurses. | Participants had negative opinions about the mentally ill. They were also authoritarian and restrictive in their perception. | Same as above |
| 5. | Iheanacho et.al, 2016. | Enugu state | C/S. | Church-based health advisors | 84% endorsed possession by evil spirits. 69% believed that people with mental illness were nuisance. Stigmatizing attitudes were high. | Same as above |
| 6. | James et.al, 2012. | Edo state | C/S. | Doctors and medical students | Participants endorsed stigmatizing attitudes towards the mentally ill with attitude more adverse for schizophrenia | Same as above |
| 7. | Chikaodiri, 2009. | Kano state. | C/S | All the workers in a teaching hospital | 64.1% were fearful of having psychiatric patients admitted in the hospital. more males expressed unfavourable attitude. | Same as above |
| 8. | Adayonfo and | Benue | C/S. | Psychiatric | 53.6% had negative attitude | Same as above. |

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|--|----------------------|------------------|--|---------|---------------------------|--|
| | Selo-Ojeme, 2017. | and Edo state | | nurses. | towards the mentally ill. | |
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DISCUSSION

This review examined the factors that militate against the use of mental health services in Nigeria. It also looked at the attitudes of mental health care workers towards the mentally ill patients in the country.

The major barriers to the use of mental health services as revealed by this review were lack of incentives for the health care workers and dearth of qualified health care workers in the country's mental health system. This has a far-reaching effect on the quality of mental health services in our country Nigeria (25,26). This is similar to the finding in a study that showed that due to limited number of trained specialists and stigma, only 10% of adults with mental illness in Nigeria receive care (40).

Stigmatization against the mentally ill was also found to be a major barrier to the use of mental health services in this review. This has been a long-standing obstacle to the use of mental health services in Nigeria (27,28,29,30,31). This is similar to the findings in a study done by James et.al,2012 (36) in Benin city and that done by Gureje et.al, 2005 (22) in Oyo, Ogun and Osun states of Nigeria. Similar findings were also reported in a study done by Patel et.al, 2007 (21).

Other findings in this review showed that misconceptions, poor access to treatment facilities,poor finances on the part of the mentally ill patients also constitute barriers to the use of mental health services in Nigeria (30,32).The studies done by Izibeloko and Eleana, 2013 (29) and Eaton et.al,

2017 (17) in Bayelsa state and Ebonyi state respectively showed that absence of services in rural communities, waiting time at the facilities, bureaucracy in treatment and poor information management constituted major barriers to the use of mental health services in Nigeria. This development has to be addressed comprehensively to pave way for improved mental health services in Nigeria.

The study done by Mosakor and Wallymahmed, 2017 (33) in Osun state, Nigeria showed that most primary health care workers held a benevolent attitude towards the mentally ill. This finding is in agreement with that of a study carried out in Borno state that reported that 90.2% of the participants had satisfactory attitudes towards substance abuse clients (41). In contrast to these findings, negative attitudes, including stigmatization were reported among health professionals in Enugu, Lagos and Benin city (35,36,37,42). The finding is similar to that of Ewhrudjakpor, 2009 in a study done in Delta state, Nigeria using doctors, nurses, social welfare officers and pharmacists. The finding showed that health professionals still harbour deep-rooted cultural beliefs against the people living with mental disorders in Nigeria.

In a study done by Chikaodiri, 2009 (37) in Aminu Kano Teaching hospital, Kano state, Nigeria using workers in the hospital, 64.1% of the respondents was reported to be fearful of having psychiatric patients admitted within the hospital and more females than males expressed unfavourable attitudes towards the mentally ill patients in the hospital. The health workers also expressed fears about treating psychiatric patients within a general hospital environment and preferred segregation of the wards and the psychiatric patients if treated within such settings. This is similar to the study done by Adeyanfo and Selo-Ojeme, 2017 (42) in Benue state using

psychiatric ward nurses in federal medical centre, Benue state and the university of benin teaching hospital, Benin city in which the respondents were found to have negative attitudes.

Iheanacho et.al, 2016 (40) in a study done in Enugu state, Nigeria using church-based health advisors, reported that 84% of the respondents endorsed possession by evil spirits, traumatic events (81%) and witchcraft (60%) as causes of mental illness. A majority (69%) believed that people with mental illness were nuisance. It concludes that stigmatizing attitudes and beliefs about mental illness were common amongst CHAs.

Poor knowledge of mental health services, centralized mental health services, long waiting time at the facilities, travel distance, high cost of service, loss of productive income, stigma and discrimination and feelings of shame were the major barriers reported by Izibeloko and Leana (29) in a study conducted in Bayelsa state, Nigeria in 2013. This is also similar to the findings in a study done by Eaton et.al in 2017 (17).

5.1 Policy Implication.

Mental health services should be integrated with the general health services at all levels of health care. Healthy attitudes and positive socio-cultural attributes in the population, particularly among the youths should be promoted to prevent aberrant behavior with adverse consequences for the mentally ill in the society. Routine seminars and workshops should be organized for health professionals with a view to eradicating stigmatization and other negative attitudes against the mentally ill in the country.

To eliminate social stigma which is often associated with mental disorders, positive attitudes towards the mentally ill among the general population should always be promoted. Increased

budgetary allocation for mental health services by the federal government should be adopted to ensure the provision of resources for the elimination of the physical, social and psychological barriers to the use of mental health services in the country.

5.2 Conclusion.

Stigmatizing attitudes and adverse cultural beliefs against the mentally ill in the society still exist significantly in the Nigerian mental system. This should be addressed through the adoption of legislations that will prescribe penalties for any person or group of persons who engages in such disrespectful act. Enlightenment programs should be routinely organized for the public on the need to incorporate the mentally ill into the society. There are still numerous barriers to the use of mental health services in Nigeria as identified in this review. Efforts should be made to eradicate these barriers through increased budgetary allocation to mental health services in Nigeria to make funds available to the sector to tackle some of these obstacles.

Conflict of interest. The authors declare no conflict of interest.

Funding. The study did not receive any funding.

Authors' contributions. CCO conceptualized and designed the work, CCO, UO, EOO and BNW drafted the manuscript. CCO and EOO critically reviewed the draft for intellectual content. All the authors read and approved the final draft for submission.

REFERENCES.

1. Chu C, Roxas N, Aguocha CM, Nwefoh E, Wang K, Dike C, Iheanacho T. Integrating mental health into primary care: evaluation of the Health Action for Psychiatric Problems In Nigeria including Epilepsy and SubstanceS (HAPPINESS) pilot project. *BMC Health Serv Res.* 2022 Mar 12;22(1):333. doi: 10.1186/s12913-022-07703-1. PMID: 35279154; PMCID: PMC8917687.
2. Ojagbemi A, Gureje O. The importance of faith-based mental healthcare in African urbanized sites. *Current opinion in Psychiatry* 2020; 33(3):271-277.
3. Chinawa J. Factors militating against effective implementation of primary health care (PHC) system in Nigeria. *Ann Trop Med Public Health.* 2015;8(1):5–9. doi: 10.4103/1755-6783.156701. [[CrossRef](#)] [[Google Scholar](#)]
4. Onyemelukwe C. Stigma and mental health in Nigeria: Some suggestions from law reforms. *Journal of Law Policy Global*; 2016; 55: 63-8.
5. World Health Organization. Depression and Other Common Mental Disorders Global Health Estimates[Internet]. Geneva;2017. Available from: <https://apps.who.int/iris/bitstream/handle/10665/254610/WHO-MSD-MER-2017.2-eng.pdf>.
6. Ryan GK, Nwefoh E, Aguocha C, Ode PO, Okpoju SO, Ocheche P, Woyengikuro A, Abdulmalik J, Eaton J. Partnership for the implementation of mental health policy in Nigeria: a case study of the Comprehensive Community Mental Health Programme in Benue State. *Int J Ment Health Syst.* 2020 Feb 21;14:10. doi: 10.1186/s13033-020-00344-z. PMID: 32110245; PMCID: PMC7033947.
7. Petersen I, Marais D, Abdulmalik J, Ahuja S, Alem A, Chisholm D, et al. Strengthening mental health system governance in six low- and middle-income countries in Africa and South Asia: challenges, needs and potential strategies. *Health Policy Plan Oxford Academic.* 2017;32:699–709. [[PMC free article](#)] [[PubMed](#)] [[Google Scholar](#)]
8. Lund C, Breen A, Flisher AJ, Kakuma R, Corrigall J, Joska JA, Swartz L, Patel V. Poverty and common mental disorders in low and middle income countries: a systematic review. *Soc Sci Med.* 2010;71(3):517–528. doi: 10.1016/j.socscimed.2010.04.027. [[PMC free article](#)] [[PubMed](#)] [[CrossRef](#)] [[Google Scholar](#)]

9. Knapp M, Funk M, Curran C, Prince M, Grigg M, McDaid D. Economic barriers to better mental health practice and policy. *Health Policy Plan.* 2006;21(3):157–170. doi: 10.1093/heapol/czl003. [[PubMed](#)] [[CrossRef](#)] [[Google Scholar](#)]
10. Dixon A, McDaid D, Knapp M, Curran C. Financing mental health services in low- and middle-income countries. *Health Policy Plan.* 2006;21(3):171–182. doi: 10.1093/heapol/czl004. [[PubMed](#)] [[CrossRef](#)] [[Google Scholar](#)].
11. World Bank. Data for Nigeria, Lower middle income | Data [Internet]. [cited 2020 Jul 11]. Available from: <https://data.worldbank.org/?locations=NG-XN>.
12. World Health Organization-Assessment Instrument for Mental Health Service .WHO-AIMS Report on mental health in Nigeria. World Health Organization and Ministry of Health Ibadan, Nigeria 2006.
13. WHO . *Mental health atlas 2014 country profile: Nigeria*. In. Geneva: World Health Organisation; 2014. [[Google Scholar](#)]
14. WONCA (2008). Integrating Mental Health into Primary Health Care: A Global Perspective Geneva. http://www.who.int/mental_health/policy/integratingmhintoprimarycare
15. Ayorinde O, Gureje O and Lawal A. Psychiatric research in Nigeria: bridging tradition and modernization. *British journal of psychiatry*, 2004; 184, 536-538.
16. Abdulmalik J, Olayiwola S, Docrat S, Lund C, Chisholm D, Gureje O. Sustainable financing mechanisms for strengthening mental health systems in Nigeria. *Int J Ment Health Syst.* 2019 May 31;13:38. doi: 10.1186/s13033-019-0293-8. PMID: 31164918; PMCID: PMC6543636.
17. Eaton J, Nwefoh E, Okafor G, Onyeonoro U, Nwaubani K, Henderson C. Interventions to increase use of services; Mental Health Awareness in Nigeria. *International Journal of Mental Health Systems* 2017; 11:66.
18. Saxena S, Thornicroft G, Knapp M, Whiteford H. Resources for mental health: scarcity, inequity, and inefficiency. *Lancet.* 2007; 370(9590): 878-889.
19. Wang PS, Guilar GS, Alonso O, Angermeyer MC, Borges G, Bromet EJ et.al. Use of mental health services for anxiety, mood and substance disorders in 17 countries in the WHO world mental health surveys. *Lancet.* 2007; 370(9590): 841-850.
20. Jacob KS, Sharan P, Mirza I, Garrido-Cumbrera M, Seedat S, Mari JJ, Sreenivas V, Saxena S. Mental health systems in countries: Where are we now? *Lancet*, 2007; 370: 1061-10677.
21. Patel V, Araya R, Chatterjees, Chisholm D, Cohen A, De Silva M, Hosman C, McGuire H, Rojas G, Van Ommeren M. Treatment and prevention of mental disorders in low-income and middle-income countries. *Lancet*. 2007; 370 (9591): 991-1005.

22. Gureje O, Lasebikan VO, Ephraim-Oluwanuga O, Olley BO, Kola L (2005). Community study of knowledge of and attitude to mental illness in Nigeria. *British Journal of Psychiatry*; 186: 436-441.
23. Saracena B, van Ommeren M, Batniji R, Cohen A, Gureje O, Mahoney J, Sridhar D, Underhill C. Barriers to improvement of Mental Health Services in low-income and middle-income countries. *Lancet*. 2007;370: 1164-74.
24. National Policy for Mental Health Services Delivery Nigeria. .Federal Ministry of Health, Abuja, Nigeria; 2013.
25. Suleiman D.E. Mental health disorders in Nigeria: A highly neglected disease. *Annual Nigerian med.*: 2016; 10: 47-8.
26. Oyelade O.O, Ayandiran E.O. Violence management in a Nigerian Psychiatric facility. *Psychiatric-Mental Health Nurses' current practices and their effectiveness. Journal of Psychosocial Nursing Mental Health Services*. 2018; 56(11): 37-45.
27. Audu IA, Idris SH, Olisah VO, Sheikh TL. Stigmatization of people with mental illness among inhabitants of a rural community in northern Nigeria. *Int J Soc Psychiatry* 2013; 59(1):55-60.
28. Oyewunmi AE, Oyewunmi OA, Iyiola OO and Ojo AY. Mental health and the Nigerian workplace: Fallcies, facts and the way forward. *International Journal of Psychology and Counselling*. 2015; Vol. 7(7): 106-111.
29. Izibeloko OJ and Leana U. Barriers to mental health services utilization in the Niger Delta region of Nigeria: service users' perspective. *The pan African Medical Journal*;2013; 14:159.
30. Oweilayefa B.G. (2017). use of Mental Health Services in Primary Health care delivery systems in a developing country: A survey of selected General hospitals in Delta state, Nigeria. *Asian Journal of social sciences and management studies*, 2017; 4(1): 65-69.
31. Sheikh T.L, Adekeye O, Olisah V.O, Mhammed A. Stigmatization of mental illness among employees of a Northern Nigerian University. *Nigeria Medical Journal*; 2015 56: 244-8.
32. Olawande T.I, Okagbue H.I, Jegede A.S, Edewor P.A, Fasasi L.T. Survey datasets on Patterns of utilization of mental health care services among people living with mental illness. *Data Brief*; 2018; 19: 2095-2103.
33. Mosakor KS, Wallymahmed AH. Attitudes of primary care health workers towards mental Health patients: A cross sectional study in Osun state, Nigeria. *Community Mental Health Journal*, 2018;53(2): 176-182.
34. Ubaka CM, Chikezie CM, Ukwe CV.(2018). Health professionals' stigma towards the psychiatric ill in Nigeria. *Ethiopian Journal of Health Science*:2018; 28(4). 483.

35. Coker AO, Coker OO, Alonge A and Kanmodi K. Nurses' knowledge and attitude towards the mentally ill in Lagos, south-western Nigeria. *International Journal of Advanced Community Medicine*: 2018;1(2): 15-21.
36. James BO, Omoaregba JO, Okogbenin ES (2012). Stigmatization attitudes towards persons with mental illness: a survey of medical students and interns from Southern Nigeria. *Mental illness*;2012; 4(8): 32-34.
37. Chikaodiri A. Attitude of health workers to the care of psychiatric patients. *Ann Gen Psychiatry*; 2009; 8-19.
38. Aniebue NP, Ekwueme CO. Health-seeking behaviour of mentally ill patients in Nigeria. *South African Journal of Psychiatry*. 2009;Volume 15 No 1/a167.
39. Ewhrudjakpor C. Knowledge, belief and attitude of health care providers towards the mentally ill in Delta State, Nigeria. *Ethno Medicine*, 2009;3, 19-25.
40. Iheanacho T, Kapadia D, Ezeanoluo CO, Osuji AA, Ogidi AO, Ike A, Patel D, Stefanovics E, Rosenheck R, Obiefuna M, and Ezeanoluo EE. Attitudes and beliefs about mental illness among church-based lay health workers: experience from a prevention of mother-to-child HIV transmission trial in Nigeria. *International Journal of Culture and mental health*, 2016; 9:1, 1-13.
41. Maigari B, Mosaku SK, Umar NJ, Kever TK, Adamu D, Hamina D. Nurses' Knowledge and Attitude towards Care of Clients with Substance Abuse in Borno state, Nigeria. *Journal of Nursing and health Science*, 2014(3):19-24.
42. Adayanfo E, Selo-Ojeme. Depressed patients seen at the University of Benin Teaching Hospital (UBTH): a six-year review. *Internet Journal of M* 2017; 12(1):15.

