

# A Systematic Identification and Review of Elements that shapes Public Perception and Management of Mental illness in Nigeria

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## Abstract

**Background:** Public perception of mental illness in Nigeria has a greater impact on the attitude portrayed towards mental disorders. Adequate management of mental illness within the population is hindered by poor awareness and inadequate mental health services.

**Aim:** This study explores existing studies on mental illness, recognized the characteristics that are pertinent to this research to discuss factors that shapes public perception and management of mental illness in Nigeria.

**Methods:** This is a literature review which was performed on studies that covers the years 2014 to 2024 using a sample of 118 journal articles chosen from a pool of 258 journal articles obtained from search of electronic databases which include Scopus, Medline, CINAHL and PubMed which were further screened for full text using inclusion and exclusion criteria to obtained 9 journal articles used for the review.

**Conclusion:** The study concluded that without government creation of public awareness of mental illness and provision of accessible mental health services, the management of mental disorders will continue to be challenging to individual experiencing mental illness.

**Keywords:** Mental illness, perception, attitudes, beliefs, awareness, stigma, public health, social determinants, and healthcare

## Introduction

Mental health is a state of total wellbeing where a person is able to manage everyday stress of life and can contribute to the society by being productive (World Health Organisation, 2024). According to WHO (2022), mental illness is a disorder that affects people's emotion, perception, thinking and behaviour.

Borsboom, (2017) underlined mental disorders as depression, anxiety, psychosis, schizophrenia and so many other disorders causing serious breakdown in mental state due to psychosocial difficulties which is a major source of disability globally.

Wada, et al (2021) emphasized mental health as a state of a person's ability to manage stressful situations, maintain gainful employment and make meaningful contributions to their community. Mental illness can affect anyone irrespective of their race, age, gender, sociocultural background and their economic situation. Nevertheless, Persaud et.al (2018) argued that situations such as being poor, uneven or inadequate distribution of income, disturbance and unrest in the society can contribute to increase in mental illness for residents of low-income countries like Nigeria.

The mental health survey conducted in Nigeria by African Polling Institute (API) and African health consulting and research group EpiAFRIC in 2020, reported poor perception and attitudes towards mental health in Nigerians relates mental illness with drug abuse, being sick in the mind, hereditary, God's punishment and demonic possession. Furthermore, the report argued that majority of Nigerians are of the belief that to be considered as mentally ill, a person must have attracted public attention by exhibiting public display of disturbing and unsettling behaviour (Mental Health in Nigeria Survey, 2020).

Nigeria is the most populated country in west Africa, with a population of 230 million (The World counts, 2024) and different cultural diversities, there is significant existence of mental health disorders however, Lawal et.al (2024) argued that there is limited public awareness and understanding of mental health conditions which can affect people's ability to identify their symptoms, look for help, support others who are experiencing or enduring mental illness and comply with treatment regime to manage the condition.

Nevertheless, despite making advanced progress in addressing health issues during Ebola Outbreaks and COVID-19 by inaugurating significant policies and legislation in the three levels of healthcare system, Nigeria mental health services still face serious challenges. (Abdulmalik et al, 2016).

Despite the increasing rate of mental illness in Nigeria, a lot of people are unable to afford treatment. Nigeria has less than 300 psychiatrists serving a population of 230 million with limited access to facilities, professionals and resources as most of the mental health facilities are located in major cities and causing people who are enduring mental illness to be looked after by family members most times (Ugochukwu et.al, 2020). The high cost of accessing mental health facilities for assessment and treatment further creates inordinate effects on people from lower socioeconomic levels most especially from rural communities (Anjorin & Wada, 2022).

Abdulmalik et al. (2016), emphasized that Nigeria's mental health laws and policies are out-of-date and flawed, since important health sector papers completely ignore mental health. Furthermore, Alu et. al (2022) underlined that Nigeria has issue with obsolete and inadequate mental health policy and legislation. Nevertheless, despite the Nigeria's notable progress in addressing difficult public health issues, there has been obstacles in the provision of mental health services, particularly those related to policy creation, laws, and integration of mental health care into primary health care due to the public perception towards mental illness (Wada et.al, 2021).

Depression, schizophrenia, bipolar disorder and anxiety are the common mental illness in Nigeria. However, despite the prevalence of these disorders, there is limited public awareness of mental illness which caused significant issue with public health. A lot of Nigerians attributed mental illness to being caused by supernatural forces or being biological (Ayinde et. al, 2023) while some conceptualize mental illness as infectious diseases or transmissible disease, or disease caused by failing morally (Pederson et.al,2023). In order to find an efficient intervention for mental illness in the community, the public must be knowledgeable in their approach towards mental illness (Killaspy et.al, 2022).

Positive attitudes and beliefs of community is however important in help seeking and treatment (Tesfaye et.al, 2020), as research by Lawal et.al (2016) identified a conventional belief about

mental illness as being dangerous, shameful and incurable. Moreso, Lawal et.al (2024) emphasized misconception of mental illness by the community as being a curse, spiritual attack, self-afflicted or hereditary and the importance of creating awareness to better manage mental disorders.

The rationale for this research is based on the argument that In Nigeria, perception of mental disorders is rooted in cultural beliefs which have significant impact on how people perceived mental illness (Labinjo et.al, 2020). Furthermore, Akinsulore et.al, (2018) argued that the lack of knowledge about mental health issues in Nigeria contributes to the pervasive ignorance and false beliefs about mental disorders. Moreover, many people are not able to recognise signs of mental deterioration or the significance of receiving therapy and assistance as soon as possible (Lasebikan, 2016). However, by addressing low awareness, this research can help shape public education initiatives, promote early intervention and lessen the overall burden of mental illness in Nigeria (O'Connor et. al, 2023).

This research seeks to improve public awareness of mental illness by addressing the research question which examines, 'what factors shapes public perception and management of mental illness in Nigeria?

This study is arranged in the following sections: Part 2 introduced the study methods section, and Part 3 described the theoretical approach. Part 4 provided a literature review to address the study questions. Part 5 provides critical observations, while Part 6 offers the paper's conclusion and consequences.

## **Research Methodology**

Research methodology is series of steps used by a researcher to carry out research (Kadasah et, al 2022). However, Panneerselvam (2014), argued that research methodology is framework of designs, processes, and strategies used to determine the answers to a research topic. Nevertheless, Pandey & Pandey (2021), emphasized research methodology as a method by which researchers plan their research in order to meet the aim of the study.

Chu et.al (2022) underlined that it is essential to comprehend Nigerian perceptions, attitudes, and beliefs towards mental illness in order to create mental health legislation, awareness programs, and intervention techniques that work. Alexander, (2020) emphasized conducting database searches broadly to ensure detailed and all-inclusive outcome of the research studies which this research is aiming to adopt.

The results of the findings will be thematically presented using narrative synthesis and will focus on literature review of 9 Journals critically searched and screened using electronic databases. In order to gain a deeper knowledge of people's perspectives towards mental illness and to determine the frequency of particular attitudes and beliefs, the journals used consist of mixed-methods, quantitative and qualitative research (Taguchi, 2018). The discussion will review factors that shapes public perception and management of mental illness in Nigeria.

## **Keywords and search terms**

Tripathi et.al (2018) emphasized search terms as variables created by users, entered into databases to retrieve relevant content while Atkinson & Cipriani (2018) argued that search terms indicate the researcher's attempt to locate pertinent materials. Nevertheless, the

effectiveness of research is contingent upon the broadness of the search terms as well as the search methods from various databases (Nishikawa-Pacher, 2022).

McEnery, (2016) underlined keywords as pre-set descriptions selected by authors to summarise the primary subjects of their work. However, Moran, (2021) suggested that keywords frequently represent the author's intention to indicate the subject of their research to databases and readers. Nonetheless, a crucial element for effectively retrieving data is the interplay between generated keywords and search terms which is very important in literature (Grames, 2019).

**Table 1: PCC**

|            |                              |
|------------|------------------------------|
| Population | Adults                       |
| Concept    | Perception of Mental illness |
| Context    | Nigeria                      |

Sources: Compiled by the Authors

Using PCC helps to guide the search strategy and identify key points. See table 1. The following keywords were identified using PCC: Mental illness, perception, attitudes, beliefs, awareness, stigma, public health, social determinants, and healthcare.

Search terms were structured from the research question and similar words were sourced for use in searching electronic database as shown in Table 2.

**Table 2: Search Terms**

| Search Term 1                            | Search Term 2                                | Search Term 3                                                        | Search Term 4                                  |
|------------------------------------------|----------------------------------------------|----------------------------------------------------------------------|------------------------------------------------|
| Adults                                   | Perception                                   | Mental illness                                                       | Management                                     |
| Grown-up<br>Mature person<br>Fully-grown | Understanding<br>Attitudes<br>Interpretation | Mental disorder<br>Mental health condition<br>Psychiatric disability | Care<br>Treatment towards<br>Behaviour towards |

Sources: Compiled by the Authors

### **Search Strategy**

The search of databases included CINAHL (Cumulative Index to Nursing and Allied Health Literature), Scopus, Medline, and PubMed. The search terms were screened, and they include the following keywords, and associated index terms: 'Adul\* OR Grown-up OR Mature person OR Fully-grown AND Perception OR Understanding OR Attitudes OR Interpretation AND Mental illness OR Mental disorder OR Mental health condition OR Psychiat\* disability AND Manag\* OR Care OR Treatment towards OR Behaviour towards AND NOT Child AND NOT Adolescence to produce the following search outcomes on Table 3.

**See Appendices Section for table 3 on Search outcomes**

### Studies Chosen

Searches were conducted using Scopus, Cinahl, PubMed and Medline databases using the identified search terms and keywords in Table 1 and Table 2 which yielded a lot of results. Furthermore, the results were screened excluding majority of the data which were not pertinent to the research topic and query and were from different population study (Lefebvre et.al 2019), not published in English and were not published in the last 10 years yielding 258 journal articles. However, these were further screened to eliminate duplicate articles and to ensure the right articles for the discussion using the key concepts were chosen producing 118 journals.

In addition, the study titles and abstracts were also screened followed by full text to meet the inclusion and exclusion criteria through which 26 papers were chosen. The selection of the sample of articles is based on their capacity to assure comprehensive coverage of the study, corroborate the aim, while making a valuable contribution to the research (Hancock et.al 2021). Nevertheless, the selected publications were analysed and screened using the CASP (Critical appraisal tool checklist) and MMMAT (Mixed method appraisal tool) to get the required 9 articles for the literature review.

### Inclusion and Exclusion criteria

Inclusion and exclusion criteria are needed to produce quality research (Patino & Ferreira, 2018). Additionally, Snyder, (2019) underlined inclusion criteria as special attributes of the demographics that are been studied for detailed information on the topic. On the other hand, Randolph, (2019), argued that exclusion criteria are studies that are removed because they do not match the demographics requirement of the study. Nevertheless, combination of inclusion and exclusion criteria establishes the eligibility of the research (Keung et.al, 2020). Criteria for inclusion and exclusion were illustrated in Table 4.

**Table 4: Inclusion/Exclusion Criteria**

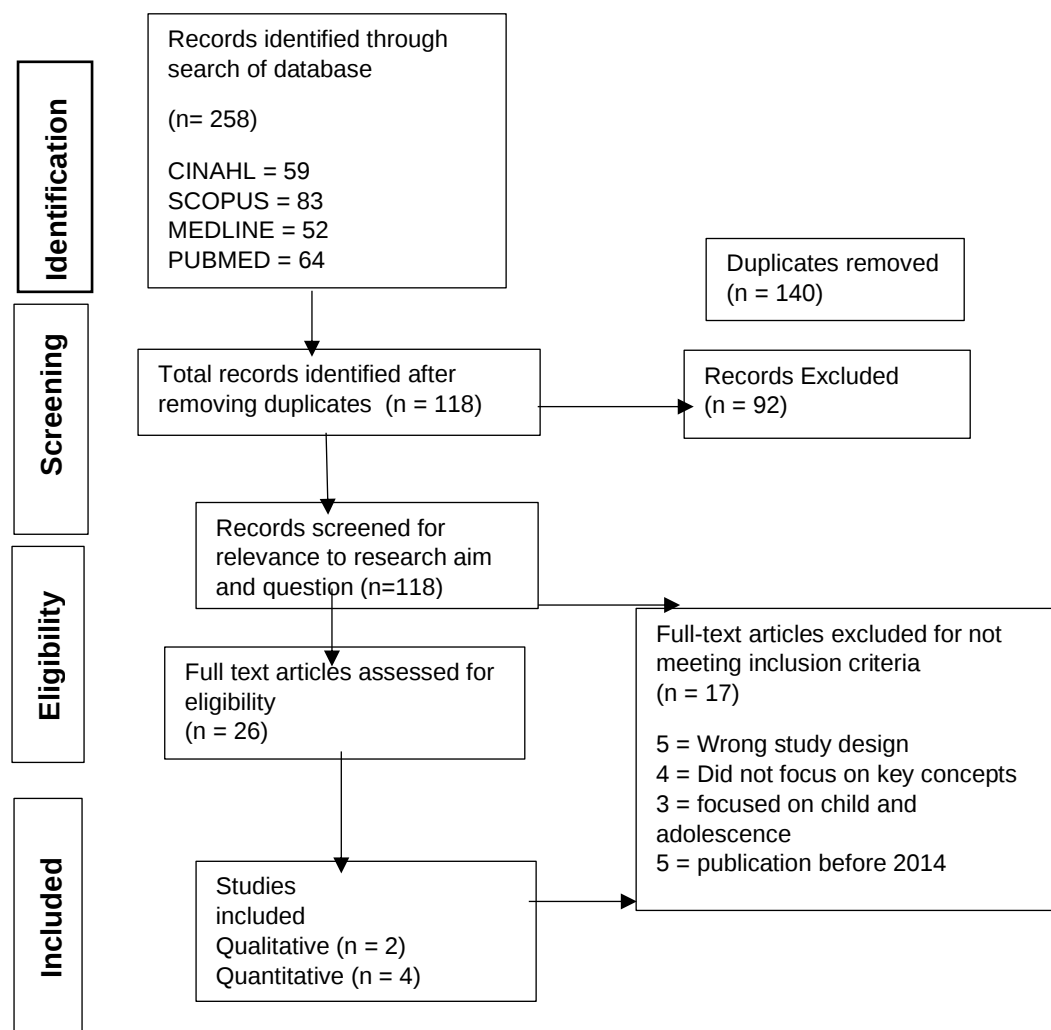
| <b>Inclusion Criteria</b>                                     | <b>Exclusion Criteria</b>                                              |
|---------------------------------------------------------------|------------------------------------------------------------------------|
| Studies that relate to the research aim and research question | Studies that do not align with the research objectives                 |
| Studies that focused on key concepts                          | Studies in which key concepts is absent                                |
| Primary research                                              | Secondary research                                                     |
| Studies that aligned with the study population                | Studies that focused on child and adolescence                          |
| Limit year 2014 - 2024                                        | Publications before 2014                                               |
| Qualitative, quantitative, and mixed methods study            | Systematic reviews, meta-syntheses, Integrative reviews, meta-analyses |
| Studies published in English                                  | Studies published in other languages                                   |

Sources: Compiled by the Authors

### Quality Assessment

Cai & Zhu, (2015) emphasized that quality assessment pertains to the methodical appraisal of a study's accuracy and dependability, However, Carroll & Booth, (2015) purported that quality assessment entails assessing the research's quality in terms of its planning, execution, analysis, and reporting in order to guarantee reliable and useful results. Nevertheless, quality assessment will help to ensure that solid data are methodically selected for the study (Bone et.al, 2014). The selected 9 articles were appraised, analysed and screened using the CASP (Critical appraisal tool checklist) and MMMAT (Mixed method appraisal tool). The flow chart of selected studies is illustrated in figure 1.

**Figure 1: Flow chart of chosen studies**



### Characteristics of included studies

The nine studies included were conducted in Nigeria because it focused on the perspectives of the samples within the population study. The articles were between 2015 and 2024 consisting of three mixed methods studies, two qualitative studies and four quantitative studies from 9 published articles as shown in Table 4. **See Appendices section for detailed**

**Table 5: Study Characteristics**

### **Characteristics of selected studies**

To conduct a comprehensive analysis of this literature review, various selection of nine (9) primary research was selected comprising of qualitative, quantitative and mixed methods designs to provide a well-rounded knowledge of the research (Brannen, 2017). Two of the selected studies were qualitative as it utilizes interviews and focus groups to gather in depth participants lived experience and perception (Moser & Korstjens, 2018), four were quantitative as they rely on numerical data and statistical analysis to draw conclusions (Taguchi, 2018), and three were mixed methods as they combine both qualitative and quantitative methods to provide a comprehensive perspective of the study (Creswell & Creswell, 2018). Characteristics of the studies were analysed. **See appendices section for details of Table 6 and Table 7.**

### **Ethical considerations of included studies**

Ethical considerations refer to the ethical standards and directives that should be followed while examining, interpreting, and disseminating previously published findings (Taquette et.al, 2022). Majority of the examined studies participants provided informed consent which is essential in mental health research to prevent distress or miscommunication (Mandal, & Parija, 2014). The studies conducted in rural setting consulted with religious or community leaders for approval. Researchers made sure that data provided by participants was anonymised and that confidential data was processed appropriately.

The majority of the studies were approved ethically by institutional ethics committees, but the level of ethical evaluation differed from study to study. Some studies pointed out the difficulty of getting written consent most especially in rural areas due to literacy level and had to use verbal consent instead (Lawton et.al, 2017).

Nevertheless, the 9 selected studies followed accepted standards of ethics (Gordon & Fomin, 2019).

### **Methodological characteristics of included findings**

The included studies demographics were 18 years and above consisting of male and female participants, Muslims, Christians, students, employed, unemployed and mental health practitioners. The sample size for the qualitative studies were between 8-13 participants and 240-637 participants for the quantitative studies. Data collection methods were in-depth interviews, focus group, semi structured interviews and questionnaires. Thematic analysis was used for analysing qualitative study and descriptive statistics were used for quantitative analysis. Findings from the studies identified with the research topic on factors that shape perception of mental illness. **See the appendices section for detailed Table 5 and Table 6: methodological characteristics of included findings.**

The research methodology was centred on performing literature review of 9 journals which are a mixture of qualitative, quantitative and mixed methods study for a deeper understanding of the research (Creswell & Creswell, 2018). The research design used PCC to identify keywords (Peter et.al, 2015) whilst study characteristics for the inclusion criteria were performed and

results for the selected studies were narrated in tabular form for easy reference. Narrative synthesis of both qualitative and quantitative data was carried out based on the four identified themes (Braun & Clarke, 2017).

## **Discussion of Findings**

This section focuses on discussing the study findings of the selected 9 journals in order to provide a better understanding of the themes and the reliability of the data (Green et.al, 2016) for the literature review. The themes provide a framework for understanding the complexity in the dynamics surrounding societal and individual experiences of mental illness in Nigeria (Jidong et al, 2021).

Analysis of the chosen studies identified 4 themes which are: Cultural beliefs about mental illness, attitudes towards mental illness, low awareness of mental health conditions and Stigmatization, which was determined through careful analysis of the findings of both qualitative and quantitative data of the 9 selected journals.

The selection of these themes was also influenced by how well they fit the research question (Vaismoradi & Snelgrove, 2019). Moreover, the choice of the theme aligns with the primary study subject (Halverson et.al, 2014) and is represented by each of these themes in a different way.

Cultural beliefs shed light on how mental illness is perceived in Nigerian society (Lawal et.al, 2024), while attitudes on mental illness reveal how people react to it and whether or not they provide care and assistance to those who are affected (Pederson et.al, 2023). Additionally, stigmatisation draws attention to the detrimental effects experienced by persons who suffer from mental illnesses, which has an impact on public perception and treatment plans (Anosike et.al 2019) whilst low awareness also reflects ignorance and lack of understanding regarding mental health (Mojiminiyi et.al, 2020)

These themes are crucial to comprehending the nuances of how mental illness is viewed in Nigeria, and they offer effective structure for tackling the social, cultural, and healthcare issues affecting mental wellbeing of Nigerian population (Labinjo et.al, 2020).

## **Narrative synthesis of results and findings**

### **Cultural beliefs about mental illness.**

Vásquez, (2020) describes beliefs as acknowledged idea, opinion or acceptances of the truthfulness or realness of particular notions and thoughts which can influence people's perception and interaction with others. However, Beit-Hallahmi & Argyle, (2014) emphasized that beliefs are mentalities that have been shaped by sentiments, understanding, upbringing, culture, religion, and even individual experiences. Nevertheless, cultural beliefs are opinions held by a community or group regarding ethics, moral standards, principles, practices, and appropriate conduct. (Kleinman & Benson, 2016).

Cultural beliefs play a vital role in in the public perception of mental illness in Nigeria. It influences the way people seek for help and treatment instead of being viewed as a medical condition (Scheid & Wright, 2017). As a result of the cultural beliefs, people relied on

traditional healers, spiritual leaders or non-medical interventions which may affect the need to go for medical interventions (Anjorin & Wada, 2022).

Cultural belief is also reflected in Lawal et.al (2024), qualitative study where it identified misconceptions of mental illness as being inherited as a result of a curse in which a participant expressed that “you find someone that is afflicted of that illness in the family”. Even though the study used a mix of different participants from different occupation, and background, the study sample is relatively small and might not be a true representative of the whole population (Vasileiou et.al, 2018), as a more diverse group of participants could have provided a broader range of perspectives on mental illness (Boddy, 2016).

A common perspective held by various participants was the belief that mental illness is spiritual in nature and attribution of mental illness to being caused by demonic possession or witchcraft. This is evident by a participant response in Pederson et.al (2023) study that “they are being possessed by a demon, so they try to flog the demon out of them”. However, the study participants were healthcare students from a single institution and might not reflect the perspective of other medical students from another university (Busk & Marascuilo, 2015).

Jidong et.al (2023) study participants attributed cultural and religious beliefs as hinderances to accessing mental health treatment in hospitals as expressed by a participant “The religious healers will tell you that your solution lies in the hand of God, come for prayers and stop your medication”. Another study participant also reiterated that “based on our culture here in Nigeria, they hold on to Juju (fetish) things. So, these are some of the factors affecting treatment”. However, the participants reflection is based on a specific mental disorder and might not be the same for other mental health conditions (Fisher et.al, 2016).

Majority of respondents in Mojiminiyi et.al (2020) and Okafor et.al (2022) studies agreed that mental illness is supernaturally caused by evil spirits and will advise people with mental illness to seek treatment from religious and traditional healers. However, the studies participants responses variables were provided by the interviewer and does not depict lived experiences of the respondents (Sadan, 2017).

Furthermore, Jidong et.al (2022) mixed methods study, also reflected the belief that mental illness is caused by demonic possession or witchcraft attack and manipulations and showed community preferences for traditional and Christian spiritual healing. This is revealed in the perception of the respondents where a participant expressed that “there are psychological conditions that could be demonic”, another explained that “some forms of mental illnesses are witchcraft or being possessed”, whilst another participant expressed that “people go to traditional healers and sacred places with the belief that they will be better”. However, the participants responses are based on the particular community culture and might differ across other cultural population (Van de Vijver & Leung, 2021).

### **Attitudes towards mental illness**

Attitude is a view or belief about something which affects its perceptions negatively, positively or neutrally (Krosnick & Petty, 2014). However, attitude is formed, and it is an assessment or judgment of something or behaviour (Vogel & Waken, 2016). Nevertheless, Vogel & Waken, (2016) purported that attitude develops as people grow, can be influenced by others and can impact on people’s way of behaving and thinking

This theme identified with the findings of Lawal et. al (2024) qualitative study which reflected how participants cultural orientation from various communities influences the type of attitudes they portray towards individuals experiencing mental illness however, this is relative to the respondents' personal views from their own community setting and might be different in other communities (Block, 2018).

Societal attitudes towards people enduring mental illness were further revealed as most participants responses depicted negative and poor attitudes towards mental illness by seeing them as very dangerous and scary. Respondents in Jidong et.al (2022) which include professionals, and non-professionals also discouraged people suffering from mental health conditions from seeking medical interventions. This is corroborated by another participant in Pederson et.al (2023) study that "If someone is going through mental illness, they should go to pastor, seek religious help and not go to hospital". However, the respondents from the studies are from a locality and might not represent a presiding opinion of the general population (Rudloff & Vinson, 2023).

Furthermore, some participants in the qualitative study of Pederson et.al (2023), expressed negative attitudes which are shared by both the community and healthcare systems towards mental illness by associating mental disorder with violent tendencies and that individual with mental illness needs to be beaten, chained and locked away to prevent them from harming other people and to prevent family shame. Additionally, another participant in the study also depicted negative portrayal of mental illness in media saying "like we do watch in movies, that alone tells reality to masses" whilst another participant stated, "when we see them, we run away from them, and I feel that is how people in the society see these people". However, the study uses cross-sectional design and would have benefited from following the same sample over a period of time using longitudinal design to determine consistency or change in opinions (Cummings, 2018).

In addition, responses from majority of participants in Akinsulore et.al (2018), and Okafor et.al (2022) quantitative studies conveyed negative attitudes towards mental illness and also showed respondents agreement that mentally ill people pose risks to others and should not receive treatment in hospital because hospital care is out of date. However, the responses provided by the study were based on the perception of the interviewer (Singer & Couper, 2017) and does not represent individual interviewee personal opinions.

### **Low awareness of mental health conditions**

Awareness is the understanding, knowledge and perception of circumstance or reality (Littlejohn, 2015). Marková, (2017) described awareness as the capacity to observe and be cognisant of one's feelings and environment. Nevertheless, awareness encompasses inner awareness which is recognizing one's thoughts and beliefs and exterior awareness which is observing what is going on in the society (Constantin et.al, 2015).

This theme examines awareness regarding mental illness (Anosike et.al, 2020) and emphasises how important it is to have education and awareness campaigns that can change people's perceptions of mental health issues and encourage a more accepting and understanding attitude towards mental illness (Iheanacho et.al, 2022).

A common characteristic of the participants is lack of adequate knowledge regarding types of mental disorders, and management of these mental health conditions. This is further revealed in the qualitative study by Pederson et al. (2023) where majority of the participants conceptualize mental illness as an attack by spiritual forces, which they believe accelerates chemical reactions in the body and as a result, they tend to prefer seeking help from religious leaders rather than pursuing medical treatment. Some participants also believe that mental illness is a communicable disease that “concerning mental illness, people don’t want something to do with them, you can come down with it too”. Another respondent in the same study also explained that “spiritual forces may trigger a chemical reaction that leads to mental illness”. Nevertheless, a limitation of this study is its reliance on a focus group sampling method by selecting participants only from medical students at a certain university, thereby limiting the generalizability of the findings (Schreier, 2018)

The mixed methods study of Adebisi et.al (2016), revealed that participants perceived people with dementia, a mental disorder as insane as explained by a participant that “dementia is a madman walking on the streets”. Some participants in the study also connected the condition to stroke which indicated lack of knowledge; however, the study could be improved by addressing sample limitations and obtaining an explanation from the respondents (Theofanidis & Fountouki, 2018) regarding the confusion between dementia and stroke.

Moreso, a participant in Lawal et.al (2024) qualitative study expressed that “one can suddenly get extreme high temperatures that can turn into mental illness”. Some participants also related types of mental illness as corporate madness. This showed lack of understanding about the distinction between mental and physical health and (Morrall, 2017). However, apart from conducting in depth interviews, the study sampling also employs focus group where dominant voices might overshadow others leading to potential bias in data collection process (O'Reilly et.al, 2021).

Furthermore, findings from Jidong et.al (2023) mixed methods study conveyed low awareness of mental disorders amongst participants of a particular age group of 45 years and above and viewed age as a predictor of knowledge as a participant expressed the belief of being drugged with marijuana as a causal factor for having bipolar disorder. Even though the study revealed limited awareness of bipolar disorder in Nigeria, the quantitative section's relevance may be limited due to the sampling strategy use of compact questionnaire. (Brannen, 2017).

In addition, most of the participants in Okafor et.al (2022), Mojiminiyi et.al (2020), Akinsulore et.al (2018), and Anosike et.al (2019) studies have poor knowledge of mental disorders. Majority of the respondents agreed that mental illness is violent in nature and that those who suffer from it should be isolated because they pose a threat to society, that the main cause of mental illness is lack of self-discipline and are mostly of the opinion that it takes longer to recover from mental illness than other diseases. Nevertheless, the participant's answers are based on interviewer-provided variables, which may introduce bias (West & Blom, 2017) and lack the depth of a genuine viewpoint.

## **Stigmatization**

Stigmatization is the attitude of showing dislike towards someone or something by behaving in a reproachful manner (Pescosolido & Martin, 2015). Additionally, Zhang et.al (2021)

emphasized stigmatisation as a socially embedded practice that devalues people by assigning labels and using stereotypes. Nevertheless, Stigmatization is discrimination against others due to prejudice or negative perceptions that others may hold about them. (Clement et.al, 2015). Stigmatization creates discrimination. The stigma associated with mental illness in Nigeria coupled with cultural belief further exacerbated the way mental illness is perceived and managed in Nigeria (Aborode et.al, 2022).

This theme aligns with the findings of Adebisi et al. (2016) mixed methods study, where participants expressed stigmatizing views towards individuals with dementia, characterizing them as forgetful, unfit for responsibility, and often subject to ridicule and social exclusion. A participant in the study explained some of the challenges faced by people enduring mental illness that “if they want to contribute to a discussion, they get shunned, and people make jest of them”. However, it is important to note that these views were primarily reported by a subsample of participants with no formal education, which may have influenced their perceptions (Malterud et.al, 2016). Therefore, these findings may not fully represent the views of other participants in the study.

In addition, respondents in the Pederson et.al (2023) study expressed how both individuals with mental illness, and their families faces discrimination in the society saying, “don’t marry or don’t associate with that family, keep your distance”. And another who is a care provider said, “They hear you a psychiatric nurse or doctor, they will be like you guys are the same as individuals with mental illness”. It was further revealed by participants in the study that “they will always be feeling ashamed because they have labelled them with mental illness”, Nevertheless, the findings of Pederson et.al (2023) qualitative study highlighted significant discrimination and stigmatization towards individuals with mental illness, and towards people who look after them as well as towards the treatment facility which discouraged people from going for treatment. However, these findings were based on the perspectives of university healthcare students. This sample may limit the generalizability of the results, as the views of students might differ from those of more experienced healthcare professionals or the general population (Smith, 2018). Despite this limitation, the study provides valuable insights into the perceptions of future healthcare professionals and underscores the need to address stigma in the society (Ubaka et.al, 2018).

The mixed methods study conducted by Jidong et.al (2023) effectively captures the lived experiences of individuals suffering from bipolar disorder, particularly highlighting the stigmatization, discrimination, and social isolation they face whilst also providing rich qualitative data on participants' experiences (Moser & Korstjens, 2018) of betrayal, offensive language, social exclusion, and other forms of mistreatment from close associates, friends, and family which offers valuable insights into personal impact of stigma. This is revealed by a participant explanation that “apart from betrayal, forcing me to be stigmatized, they use offensive words on me as a mad man person when I am not mad”. Another participant in the same study said, “discrimination at times, people look down on you, tend to forsake you, nobody to communicate to you”. Nevertheless, if the research is expanded coupled with population diversity, it will enrich the findings and improve generalizability (Hays & McKibben, 2021).

Additionally, a greater number of respondents in the studies of Anosike et.al (2019), Mojiminiyi et.al (2020), and Adebisi et.al (2016) expressed discriminating perspectives towards people with mental disorders, their care givers, and family members. They are of the opinion that people with mental illness should be stigmatized, and that people should avoid them, not give them any responsibility, stay away from them, treat them as an outcast, isolate them and keep them behind locked doors. In addition, most participants agreed that individual with mental disorders and their family members are ashamed and embarrassed because of their conditions. However, there could be Interviewers bias in the variables provided in the administered questionnaire which might affect the outcome of the findings (Singer & Couper, 2017).

In Summary, the findings from the 9 studies revealed a significant challenge and insights into individual, community and societal perception and management of mental illness in Nigeria (Okpalauwaekwe et.al, 2017). It shows an increasing need for improved mental health services and education to address the public perspectives of mental health conditions to enable the right care and better outcome (Okazaki & Sue, 2016).

### **Empirical Discussions of Findings**

This section offers a thorough discussion of the major themes that emerged from the findings of the research on factors that shapes public perception and management of mental illness in Nigeria with an emphasis on societal attitudes, cultural beliefs, awareness, and the problem of stigmatisation.

Jidong et.al, (2021) emphasized that cultural beliefs have a significant impact on the understanding and interpretation of mental illness in Nigeria, which frequently shapes societal opinions and reactions towards persons who are affected. Olawande et. al (2019) argued that cultural beliefs shape attitudes towards mental illness in Nigeria, where many people associate mental illnesses with individual failing, witchcraft or divine punishment (Jidong et.al, 2022). This adds to the lack of understanding in management and caring for people with mental health problems and can result in unfavourable health consequences or mortality (Nguyen-Finn, 2023).

In addition, the discussion will examine the widespread stigma associated with mental illness in Nigeria. Yohani et.al (2020) emphasized that individuals suffering from mental disorders are frequently socially excluded, stigmatised, and subjected to discrimination. Furthermore, Anosike et.al (2019) argued that not only does this stigma have an impact on the individuals involved but it also deters others from getting treatment. Nevertheless, by using these themes, the conversation hopes to clarify the intricate sociocultural aspects that surround mental illness in Nigeria and their effects on management of mental health conditions (Lasebikan, 2016).

### **Empirical Discussions**

#### **Cultural perspectives**

Nigeria's rich cultural environment has a big impact on the way people view and deal with mental illnesses in their communities. It is very important to understand and appreciate the diversities of various cultures present in the Nigeria setting and their cultural beliefs which are

rooted in religion, spirituality and cultural traditions because it plays a greater role in people's perception and management of mental illness (Okafor et.al, 2022).

Many Nigerians does not accept mental illness as a medical condition due to the belief that mental illness is caused supernaturally. This pattern of culture frequently isolate mental illness where people who suffer from it are looked down upon and made to feel ashamed (Okpalauwaekwe et.al, 2017). Seeking medical treatment is seen as waste of money because of the cultural influence attached to mental illness that it is the wrought of gods as a result of past transgression (Jidong et.al, 2021). Okafor et.al (2022) study further highlighted the belief that people would seek traditional medicine rather than medical treatment because they believe that mental illness is caused by bad spirits or inflicted by witches as a means of punishment.

Additionally, societal attitude towards seeking medical treatment for mental disorder is further influenced by the spiritual belief that mental illness can be cured through prayer and fasting (Jidong et.al 2022) which can impact on seeking clinical interventions.

Lawal et.al (2024) emphasized that many Nigerians frequently see mental health issues as self-inflicted illness as a result of visiting occultic places for “ bad juju” or magical power to do money rituals or to hurt someone which has now backfired and would not be treated medically except through traditional healing methods or spiritual healing process. Jidong et.al (2022) underlined that many Nigerian cultures attribute mental illness to demonic possession, witchcraft or ancestor spirits' wrath. As a result, rather than seeking medical treatment, many people and families may choose to seek it from traditional healers or religious authorities (Anjorin & Wada, (2022).

This cultural belief was reflected in five of the studies and supported by other literatures. Majority of the studies ascribed deeply rooted cultural beliefs to mental illness. However, Lawal et.al (2024) perception of spiritual beliefs as the cause of mental illness cannot be said to represent the belief of all Nigerians as it was conducted in rural community of Nigeria. Similar perception was conceived by Pederson et.al (2023) and Mojiminiyi et.al (2020) studies conducted in the urban community. Even though the sample for the study by each author was taken from within a city in Nigeria, it might not constitute the public perception of mental illness. Additionally, Jidong et.al (2022), and Okafor et.al (2022) attribution of not seeking clinical interventions to cultural belief may not totally express belief of others as it might vary widely across Nigeria.

From my perspective, while it is important to appreciate the culture, the influence of culture on how public perceive and manage mental illness has impacted on people's ability to seek appropriate medical interventions. Nigeria cultural environment is dominated by traditional, Islamic and Christian religions. The authorities of these religions play important roles in how mental illness is perceived and treated and moreover, going to them for help is cheaper and they are easily accessible compared to seeking treatment from mental health hospital (Alao, 2022). However, while engaging in spiritual or religious activities might be consoling, they may also lead to delay in seeking required medical attention which could escalate deterioration in mental state. (Tesfaye et.al, 2020).

Moreover, while the role of religion and tradition is important within the Nigeria cultural context, it shows the importance of improving public awareness and management of mental disorders within the clinical context.

### **Negative perception**

Stigmatization plays a critical role in the public perception of mental illness in Nigeria. Studies have identified that Individuals enduring mental illness are excluded and socially isolated which prevent them from getting help out of concern that they will be labelled and treated with disdain by public (Labinjo et.al, 2020 & Kimotho, 2021). Mentally ill people are often discriminated or stereotyped due to misinterpretation ingrained by cultural beliefs (Adebiyi et.al, 2016 and Owoeye, 2024).

Okafor et.al (2022) underlined that people with mental health disorders are frequently neglected and mistreated as a result of these attitudes which support discriminatory practices. Olagundoye et, al (2017) highlighted how the stigma extended to friends and family members of people of individuals experiencing mental illness. However, this can create a constraint on their support network and cause a situation where their loved ones might avoid associating with them due to fear of being stigmatized by the society.

Tungchama et.al (2019), underlined that health workers displayed negative attitudes towards those who suffer from mental disorders by socially excluding them, which can be attributed to lack of awareness and psychiatric training, and of the belief that mental illnesses are harmful and people suffering from mental disorder are violent. Nevertheless, this creates a major obstacle to care provision and management of mental illness.

Hanafiah & Bortel, (2015) highlighted that stigma created by mental illness as barriers to seeking medical help, creating social connections and accessing basic necessities of life. Nevertheless, this stigma can create financial hardship as people enduring mental illness may find it difficult to get work due to the negative perceptions. Moreso, there is also the culture of silence due to pervasive stigma associated with mental illness most especially among the employed category because they are afraid of disclosing their conditions to their employers and peers for fear of being sacked and fear of rejection. (Labinjo et.al 2020). However, this can make them to suffer in silence and not seek help causing fatality.

In addition, Bamgbose et al. (2023) study also reflected negative attitudes at work towards workers with mental health disorders in Nigeria showing significant stigma that exist around mental health in the workplace as workers have widespread fear of stigmatisation if they told their bosses about their mental health issues. However, this causes anxiety which prevents people from asking for help which may exacerbate mental health conditions and reduce productivity at work

The study of Perderson et al (2023) further highlighted stigmatizing and attitudes towards mental illness by the Nigerian public due to perception of violent tendencies associated with the illness. However, these discriminatory attitudes and behaviours often made them to be rejected, neglected and socially excluded.

Negative perception was reflected in six of the studies. In view of the above assertions, Owwoeye (2024), Akinsulore et.al (2018) and Jidong et.al (2022) perception of negative attitudes towards mental illness might not portray an accurate reflection of people's attitude as the studies were conducted in rural communities. Even though Mojiminiyi et.al (2020) and Okafor et al (2023) perspectives of discriminatory attitude towards mental disorder are based on perception of individuals living in urban area, however the sample is drawn from a state in Nigeria which comprises of 36 states and might not represent perception of other individuals across the federation. Additionally, Pederson et. al (2023) and Anosike et.al (2019) perceptions were based on of two different Universities out of 274 Universities in Nigeria and might not represent the perceptions of all Universities throughout Nigeria.

Nevertheless, low awareness and lack of understanding of mental disorders in Nigeria are one of the major obstacles to treatment. These Negative perceptions and misleading information frequently influence people's attitudes towards mental illness and create the stigma attached to mental illness. This negative attitude is further fuelled by the attribution of mental illness to spirituality (Soyannwo et.al. 2020) rather than being viewed from the medical perspectives which makes it difficult for individuals with mental health conditions to get necessary medical care and immediate treatment thereby impacting on managing their conditions appropriately

From my perspective, Nigerians demonstrated both positive and negative attitudes towards mental illness. However, the negative attitudes are impacted by access to primary healthcare, most especially in rural areas which resulted to seeking religious healing as it's a cheaper method of getting treatment (Kuyinu et.al, 2020) while the positive attitude is the willingness and desire to seek treatment in the hospital to get better as expressed by some participants in the urban area. Nevertheless, there should be adequate training provided for all health professionals as the first contact to prevent socially excluding individuals with mental illness. It is therefore important to create awareness, address stigma and improve access to mental health services

### **Impact on care**

Inadequate knowledge of mental health conditions can cause detrimental health consequences to the individuals and their carer (Kutcher et.al, 2016). Nigerian's attitudes towards mental illness are impacted by access to clinical interventions (Abubakar et.al, 2022) most especially in rural areas which resulted to seeking religious healing as it's a cheaper method of getting treatment.

Furthermore, Jidong et. al (2022) emphasized that the major obstacle to treatment is people's attribution of mental illness to physical illness. Pederson et.al (2023) highlighted poor knowledge of mental illness and its management with the misconception that it cannot be treated unless traditional healers and mental health professionals work together. However, depending on traditional methods might exacerbate mental health conditions and cause delays in receiving appropriate medical care.

Owwoeye (2024) and Akinsulore et.al (2018) attributed low awareness to inadequate public health campaigns and knowledge gap created by schools by not educating and teaching on mental health related topic. Mojiminiyi et.al (2020) argued that many Nigerians are not able to

recognise signs of mental health deterioration. Nevertheless, despite the knowledge gap, the high cost of accessing care made it difficult for people with mental illness to seek medical interventions (Wada et.al, 2022).

In creating awareness, the media portrayal of mental illness was not sufficient in comparison to coverage of other health problems as the media solely reports on substance abuse and suicide whereas, there are other mental disorders which are not projected by the media which could have impacted on the public knowledge of mental illness (Erubami et.al, 2023). However, there is critical need for public health campaigns on mental illness in Nigeria which will benefit everyone and most especially people experiencing mental illness to create awareness (Alloh et.al, 2018).

There also are few mental health services and facilities in Nigeria's which makes the public health system inadequate (Gureje et.al, 2015). Rural communities are disadvantaged by the scarcity of psychiatric facilities, which are primarily located in urban regions (Abubakar et.al, 2022). This, however, hinders people from getting continuous and adequate care resulting in worse outcomes.

In addition, due to low awareness the available mental health services are also underutilised (Ajike et.al, 2022). Moreover, insufficient government funding for mental health services exacerbates the nation's inadequate mental health governance which makes the nation ill-equipped to handle the rising number of mental illnesses and making it challenging for people to access care (Odilibe et.al, 2024)

Six of the studies on low awareness reflected its impact on accessing care and treatment. The studies concertedly highlighted low awareness and perception of mental illness. However, Jidong et.al (2022), Pederson et.al (2023), and Lawal et.al (2024) perceptions of low awareness regarding mental illness in Nigeria was from small study sample sizes and not a realistic representative of Nigeria population. Furthermore, Jidong et.al (2023) study categorising low awareness to a specific age group could be oversimplifying the problem because apart from age, variables like education, socioeconomic status, life events, and intellectual growth can affect awareness (Mirowsky, 2017). Nevertheless, Mojiminiyi et.al (2020) and Akinsulore et.al (2018) assertion of lack of awareness might not acknowledge a few significant advancements in awareness as study by Alu et.al (2018) identified rising understanding and consciousness of mental disorders.

In my opinion, low awareness about mental illness could be attributed mostly to the perspectives of people living in rural area, most especially the older generations who may not understand the medical and psychological causes of mental illness and may hold on to traditional beliefs which may affect their level of awareness and care provision (Ojobo & Ekele, 2023). However, there has been increasing awareness of mental illness through media and public health campaigns even though this are not adequately projected in the rural areas which is causing imbalance in awareness and management of mental illness (Adewuya et.al, 2022)

## **Management**

The burden of providing care for those with mental illness in Nigeria is usually carried out by the family members, due to financial constraints and access to mental health hospitals. (Ugochukwu et.al, 2020). However, while acknowledging family as a great source of support, caring for mental health conditions required expertise which is needed to support and manage mental disorders efficiently (Mojiminiyi et.al 2020).

Additionally, Individual experiencing mental illness with willingness to seek clinical interventions are not able to access treatment due to scarcity of public psychiatric hospitals (Soyannwo et.al, 2020). Furthermore, due to lack of mental health services in rural areas and concentration of the limited public mental health facilities in the urban areas, people usually travel long distances for treatment or resulted to seeking traditional and religious healing methods in the management of their conditions (Anyebe et.al, 2021).

Moreso, the cost of care is expensive and beyond the means of many people as most of the medications are not manufactured in Nigeria and very expensive to access due to poverty level most especially in the rural areas (Anjorin & Wada, 2022).

Moreover, management and care for mental illness in Nigeria is below standard and further made worse with less than 300 psychiatrists and limited mental health nurses to manage the increasing number of identified cases of mental conditions compared to the country population as a result of international migration for economic reasons which impacted on level of care provided (Olorunfemi et al, 2020).

### **Limitations of the Study**

- Due to the ethnic and cultural diversity of Nigeria's population, the selected studies may not have adequately examined the major regional variations in public perception of mental illness and management strategies.
- The methodology, data collection and sample sizes of the included studies differed which might have impact on the findings.
- It is possible that deep rooted cultural views on mental illness are left out because research written in local Nigerian languages were not incorporated due to the inclusion criteria.
- This research does not collect primary data and was restricted to secondary examination of previously published studies. It could not accurately represent the recent advancement and current views of the general public.

Finally, understanding and managing mental illness is made more complex by public perception of mental illness (Labinjo et.al, 2020). This chapter examined the intricate interactions of the primary themes and also discussed the findings wider ramifications. In addition, limitations of the study, including any methodological restrictions, are considered on how these might have affected the outcomes.

### **Conclusion & Recommendations**

This section provides a summary of the main themes that was identified on factors that shapes public perception and management of mental illness in Nigeria. It also offers recommendations to enhance management of mental illness, lessen stigma and increase public awareness in Nigeria.

### **Recommendations**

- Nigerian government to create awareness on mental illness through the National orientation agency (NOA), that has offices in all the 774 local government in Nigeria with emphasis on biological and psychological causes of mental illness over supernatural interpretations in order to reduce the stigma associated with mental illness and encourage seeking for clinical interventions. (NOA) is a government agency tasked with providing accurate and timely information to citizens of Nigeria.
- The government to provide specialist training for doctors and nurses in Nigeria on the management of mental illness.
- Government to promote retention of psychiatrists, psychologists, and mental health nurses through improved salaries and remuneration.
- Establishment of specialised mental health hospitals in six geo-political zones in Nigeria and other secondary healthcare facilities in rural areas for easy accessibility.
- Constant review and effective Implementation of Mental health Acts to adequately guide the management of mental illness Nigeria.
- Increase budget allocations on mental healthcare to ensure adequate provision and support for those experiencing mental illness.

## Conclusion

This literature review provides a detailed overview of how mental illness is perceived in Nigeria society and how cultural beliefs and low awareness played a vital role in the understanding and management of mental health disorders. The study also showed the impact of stigmatization in the way people behave towards individuals experiencing mental illness, how these individuals and their families are subjected to discrimination because of this stigma and how these negative societal attitudes affect their ability to seek appropriate treatment.

The narrative synthesis of the findings also reveals the correlation between the themes, their prevalence and how they shape public perception and management of mental illness in Nigeria. The financial limitation, the expensive healthcare and geographic disparities also aggravate the problems of seeking adequate clinical interventions.

The study also identifies research gaps and provide suggestions to improve knowledge. In addition, the contribution from the study will support future research to help increase awareness and management of mental illness in Nigeria sociocultural environment.

## References

1. Ayinde, O.O., et al., 2023. Explanatory models, illness, and treatment experiences of patients with psychosis using the services of traditional and faith healers in three African countries: Similarities and discontinuities. *Transcultural Psychiatry*, 60 (3), 521-536.
2. Anjorin, O. and Wada, Y.H., 2022. Impact of traditional healers in the provision of mental health services in Nigeria. *Annals of Medicine and Surgery*, 82.
3. Adebisi, A.O., Fagbola, M.A., Olakehinde, O. and Ogunniyi, A., 2016. Enacted and implied stigma for dementia in a community in south-west Nigeria. *Psychogeriatrics*, 16(4), pp.268-273.
4. Abdulmalik, J., Kola, L. and Gureje, O., 2016. Mental health system governance in Nigeria: challenges, opportunities and strategies for improvement. *Global Mental Health*, 3, p.e9.

5. Adewuya, A.O., Oladipo, O., Ajomale, T., Adewumi, T., Momodu, O., Olibamoyo, O., Adesoji, O., Adegbokun, A. and Adegbaju, D., 2022. Epidemiology of depression in primary care: Findings from the Mental Health in Primary Care (MeHPriC) project, Lagos, Nigeria. *The International Journal of Psychiatry in Medicine*, 57(1), pp.6-20.
6. Albarracín, D., Johnson, B.T. and Zanna, M.P., 2014. *The handbook of attitudes*. Psychology Press.
7. Atkinson, L.Z. and Cipriani, A., 2018. How to carry out a literature search for a systematic review: a practical guide. *BJPsych Advances*, 24(2), pp.74-82.
8. Anosike, C., Ukwe, C.V. and Oparah, A.C., 2020. Attitudes of pharmacy and non-pharmacy students towards mental illness in Nigeria: a comparative survey. *International Journal of Pharmacy Practice*, 28(4), pp.346-354.
9. Anyebe, E.E., Olisah, V.O., Garba, S.N., Murtala, H.H. and Danjuma, A., 2021. Barriers to the provision of community-based mental health services at primary healthcare level in northern Nigeria—A mixed methods study. *International Journal of Africa Nursing Sciences*, 15, p.100376.
10. Aluh, D.O., Onu, J.U. and Caldas-de-Almeida, J.M., 2022. Nigeria's mental health and substance abuse bill 2019: Analysis of its compliance with the United Nations convention on the rights of persons with disabilities. *International journal of law and psychiatry*, 83, p.101817.
11. Akinsulore, A., Esimai, O.A., Mapayi, B.M. and Aloba, O.O., 2018. Public awareness and attitude towards depression: a community-based study among an adult population in Ile-Ife South-Western Nigeria. *Community mental health journal*, 54, pp.866-874.
12. Anjorin, O. and Wada, Y.H., 2022. Impact of traditional healers in the provision of mental health services in Nigeria. *Annals of Medicine and Surgery*, 82, p.104755.
13. Alao, Abiodun. *Religion, public health and human security in Nigeria*. Routledge, 2022.
14. Alexander, P. A. (2020) Methodological Guidance Paper: The Art and Science of Quality Systematic Reviews. *Review of educational research*. [Online] 90 (1), 6–23.
15. Anosike, C., Igboeli, N.U., Ukwe, C.V. and Okani, C.V., 2019. Comparative survey of beliefs about mental illness among pharmacy and non-pharmacy students of a Nigerian university. *Mental Health and Social Inclusion*, 23(3), pp.112-120.
16. Ajike, P.T., Ariyo, E.A., Ariyo, A.M. and Adubi, K., 2022. Emerging adults' awareness and perceptions of mental health problems and services in Nigeria. *Policy Insights from the Behavioral and Brain Sciences*, 9(1), pp.44-48.
17. Abubakar, I., Dalglish, S.L., Angell, B., Sanuade, O., Abimbola, S., Adamu, A.L., Adetifa, I.M., Colbourn, T., Ogunlesi, A.O., Onwujekwe, O. and Owoaje, E.T., 2022. The Lancet Nigeria Commission: investing in health and the future of the nation. *The Lancet*, 399(10330), pp.1155-1200.
18. Aborode, A.T., Corriero, A.C., Mehmood, Q., Nawaz, A., Aayush, Upadhyay, P., Badri, R. and Hasan, M.M., 2022. People living with mental disorder in Nigeria amidst COVID-19: Challenges, implications, and recommendations. *The International journal of health planning and management*, 37(3), pp.1191-1198.
19. Alloh, F.T., Regmi, P., Onche, I., van Teijlingen, E. and Trenoweth, S., 2018. Mental health in low-and middle income countries (LMICs): going beyond the need for funding. *Health Prospect: Journal of Public Health*, 17(1), pp.12-17.
20. Aluh, Deborah O., Obinna C. Anyachebelu, Chibueze Anosike, and Ezinne L. Anizoba. "Mental health literacy: what do Nigerian adolescents know about depression?." *International journal of mental health systems* 12 (2018): 1-6.

21. Busk, P.L. and Marascuilo, L.A., 2015. Statistical analysis in single-case research: Issues, procedures, and recommendations, with applications to multiple behaviors. In *Single-case research design and analysis (psychology revivals)* (pp. 159-185). Routledge.
22. Borsboom, D., 2017. A network theory of mental disorders. *World psychiatry*, 16(1), pp.5-13. Accessed August 18, 2024.
23. Block, P., 2018. *Community: The structure of belonging*. Berrett-Koehler Publishers, (2) pp 11-37. Accessed August 18, 2024.
24. Bone, J., Barraclough, D., Eggleton, P., Head, M., Jones, D.T. and Voulvoulis, N., 2014. Prioritising soil quality assessment through the screening of sites: the use of publicly collected data. *Land degradation & development*, 25(3), pp.251-266.
25. Beit-Hallahmi, B. and Argyle, M., 2014. *The psychology of religious behaviour, belief and experience*. Routledge.
26. Brannen, J., 2017. Combining qualitative and quantitative approaches: an overview. *Mixing methods: Qualitative and quantitative research*, pp.3-37.
27. Boddy, C.R., 2016. Sample size for qualitative research. *Qualitative market research: An international journal*, 19(4), pp.426-432.
28. Clarke, V. and Braun, V., 2017. Thematic analysis. *The journal of positive psychology*, 12(3), pp.297-298.
29. Cai, L. and Zhu, Y., 2015. The challenges of data quality and data quality assessment in the big data era. *Data science journal*, 14, pp.2-2.
30. Carroll, C. and Booth, A., 2015. Quality assessment of qualitative evidence for systematic review and synthesis: Is it meaningful, and if so, how should it be performed? *Research synthesis methods*, 6(2), pp.149-154.
31. Chu, C., Roxas, N., Aguocha, C.M., Nwefoh, E., Wang, K., Dike, C. and Iheanacho, T., 2022. 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 services research*, 22(1), p.333.
32. Cummings, C.L., 2018. Cross-sectional design. *The SAGE Encyclopedia of Communication Research Methods*. Thousand Oaks: SAGE Publications Inc. Retrieved.
33. Constantin, Elena Claudia, Marion-Ivonne Cohen-Vida, and Alexandra Valeria Popescu. "Developing cultural awareness." *Procedia-Social and Behavioral Sciences* 191 (2015): 696-699.
34. Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approach* (5th ed.). Sage Publications.
35. Clement, S., Schauman, O., Graham, T., Maggioni, F., Evans-Lacko, S., Bezborodovs, N., Morgan, C., Rüsch, N., Brown, J.S. and Thornicroft, G., 2015. What is the impact of mental health-related stigma on help-seeking? A systematic review of quantitative and qualitative studies. *Psychological medicine*, 45(1), pp.11-27.
36. Fisher, G.G., Matthews, R.A. and Gibbons, A.M., 2016. Developing and investigating the use of single-item measures in organizational research. *Journal of occupational health psychology*, 21(1), p.3.
37. Grames, Eliza M., Andrew N. Stillman, Morgan W. Tingley, and Chris S. Elphick. "An automated approach to identifying search terms for systematic reviews using keyword co-occurrence networks." *Methods in Ecology and Evolution* 10, no. 10 (2019): 1645-1654.
38. Green, J.P., Tonidandel, S. and Cortina, J.M., 2016. Getting through the gate: Statistical and methodological issues raised in the reviewing process. *Organizational Research Methods*, 19(3), pp.402-432.

39. Gureje, O., Abdulmalik, J., Kola, L., Musa, E., Yasamy, M.T. and Adebayo, K., 2015. Integrating mental health into primary care in Nigeria: report of a demonstration project using the mental health gap action programme intervention guide. *BMC health services research*, 15, pp.1-8.
40. Gordon, J.S. and Fomin, V.V., 2019. Ethics and Standardization. In *Corporate standardization management and innovation* (pp. 177-192). igi Global.
41. Hancock, D.R., Algozzine, B. and Lim, J.H., 2021. Doing case study research: A practical guide for beginning researchers.
42. Halverson, L.R., Graham, C.R., Spring, K.J., Drysdale, J.S. and Henrie, C.R., 2014. A thematic analysis of the most highly cited scholarship in the first decade of blended learning research. *The internet and higher education*, 20, pp.20-34.
43. Hays, D.G. and McKibben, W.B., 2021. Promoting rigorous research: Generalizability and qualitative research. *Journal of Counseling & Development*, 99(2), pp.178-188.
44. Hanafiah, A.N. and Van Bortel, T., 2015. A qualitative exploration of the perspectives of mental health professionals on stigma and discrimination of mental illness in Malaysia. *International journal of mental health systems*, 9, pp.1-12.
45. Iheanacho, P.N., Mbadugha, C.J., Anetekhai, C.J., Ubah, C.I., Obiekwu, A.L. and Chukwujama, N.A., 2022. Human rights of people with mental illness: determining knowledge and attitude of nursing students in Enugu state Nigeria. *International Journal of Human Rights in Healthcare*, 15(5), pp.462-476.
46. Jidong, Dung Ezekiel, Di Bailey, Tholene Sodi, Linda Gibson, Natéwindé Sawadogo, Deborah Ikhile, David Musoke, Munyaradzi Madhombiro, and Marcellus Mbah. 2021: "Nigerian cultural beliefs about mental health conditions and traditional healing: a qualitative study." *The Journal of Mental Health Training, Education and Practice* 16, no. 4 285-299.
47. Jidong, D.E., Ike, T.J., Tribe, R., Tunariu, A.D., Rohleder, P. and Mackenzie, A., 2022. Berom cultural beliefs and attitudes towards mental health problems in Nigeria: a mixed-methods study. *Mental Health, Religion & Culture*, 25(5), pp.504-518.
48. Jidong, D.E., Husain, M.I., Ike, T.J., Husain, N., Taru, M.Y., Nnaemeka, N.C., Francis, C., Jack, D.B., Mwankon, S.B., Xue, S. and Pwajok, J.Y., 2023. Bipolar disorders in Nigeria: a mixed-methods study of patients, family caregivers, clinicians, and the community members' perspectives. *International Journal of Bipolar Disorders*, 11(1), p.2.
49. Killaspy, H., Harvey, C., Brasier, C., Brophy, L., Ennals, P., Fletcher, J. and Hamilton, B., 2022. Community- based social interventions for people with severe mental illness: a systematic review and narrative synthesis of recent evidence. *World Psychiatry*, 21(1), pp.96-123.
50. Kleinman, A. and Benson, P., 2016. Anthropology in the clinic: the problem of cultural competency and how to fix it. *Understanding and applying medical anthropology*, pp.344-349.
51. Kuyinu, Y.A., Femi-Adebayo, T.T., Adebayo, B.I., Abdurraheem-Salami, I. and Odusanya, O.O., 2020. Health literacy: prevalence and determinants in Lagos state, Nigeria. *PloS one*, 15(8), p.e0237813.
52. Krosnick, J.A. and Petty, R.E., 2014. Attitude strength: An overview. *Attitude strength*, pp.1-24.
53. Kutcher, S., Wei, Y. and Coniglio, C., 2016. Mental health literacy: Past, present, and future. *The Canadian Journal of Psychiatry*, 61(3), pp.154-158.

54. Kraus, S. et al. (2022) Literature reviews as independent studies: guidelines for academic practice. *Review of managerial science*. [Online] 16 (8), 2577–2595.
55. Keung, E.Z., McElroy, L.M., Ladner, D.P. and Grubbs, E.G., 2020. Defining the study cohort: inclusion and exclusion criteria. *Clinical Trials*, pp.47-58.
56. Kimotho, Stephen Gichuhi. 2021 "Understanding the nature of stigma communication associated with mental illness in africa." *Handbook of research on applied social psychology in multiculturalism (Research essentials, S. 20–41)*. Hershey, PA: IGI Global. <https://doi.org/10.4018/978-1-5225-3808-0.ch002>
57. Lawal, S.A., et al., 2024. Social domains of poor mental health: A qualitative pilot study of community stakeholders' understanding and demarcation of mental illness and its interpretations in rural Nigeria. *Health Science Reports*, 7 (2).
58. Lawton, J., Hallowell, N., Snowdon, C., Norman, J.E., Carruthers, K. and Denison, F.C., 2017. Written versus verbal consent: a qualitative study of stakeholder views of consent procedures used at the time of recruitment into a peripartum trial conducted in an emergency setting. *BMC Medical Ethics*, 18, pp.1-13.
59. Labinjo, T., Serrant, L., Ashmore, R. and Turner, J., 2020. Perceptions, attitudes and cultural understandings of mental health in Nigeria: A scoping review of published literature. *Mental health, religion & culture*, 23(7), pp.606-624.
60. Lasebikan, V.O., 2016. Cultural aspects of mental health and mental health service delivery with a focus on Nigeria within a global community. *Mental health, religion & culture*, 19(4), pp.323-338.
61. Lefebvre, C., Glanville, J., Briscoe, S., Littlewood, A., Marshall, C., Metzendorf, M.I., Noel-Storr, A., Rader, T., Shokraneh, F., Thomas, J. and Wieland, L.S., 2019. Searching for and selecting studies. *Cochrane Handbook for systematic reviews of interventions*, pp.67-107.
62. Littlejohn, C., 2015. Knowledge and awareness. *Analysis*, 75(4), pp.596-603. Accessed September 05, 2024.
63. Marková, I., 2017. *Human awareness: Its social development*. Routledge. Accessed September 05, 2024.
64. Mojiminiyi, I., 2020. Knowledge and attitude towards mental disorders among adults in an urban community in south-west Nigeria. *Malawi Medical Journal*, 32(2), pp.87-94.
65. Mandal, J. and Parija, S.C., 2014. Informed consent and research. *Tropical parasitology*, 4(2), pp.78-79.
66. Mental Health in Nigeria Survey, 2020. [Mental Health in Nigeria Survey - Press Release - Africa Polling Institute](#), [Mental Health Publication \(africapolling.org\)](#). January 2020 Report.pdf, Accessed June 20, 2024.
67. Moser, A. and Korstjens, I., 2018. Series: Practical guidance to qualitative research. Part 3: Sampling, data collection and analysis. *European journal of general practice*, 24(1), pp.9-18.
68. McEnery, T., 2016. Keywords. In *Triangulating methodological approaches in corpus linguistic research* (pp. 20-32). Routledge.
69. Moran, M., 2021. Keywords as method. *European journal of cultural studies*, 24(4), pp.1021-1029.
70. Morrall, P., 2017. *Madness: Ideas about insanity*. Routledge. pp 1-12. Accessed September 07, 2024
71. Mirowsky, J., 2017. *Education, social status, and health*. Routledge. Accessed September 03, 2024

72. Malterud, K., Siersma, V.D. and Guassora, A.D., 2016. Sample size in qualitative interview studies: guided by information power. *Qualitative health research*, 26(13), pp.1753-1760.
73. Mental Health Education or awareness programmes in schools. (2021). OECD Health Policy Studies. <https://doi.org/10.1787/69ab029c-en>. Accessed June 12, 2024
74. Nguyen-Finn, K.I.M.L., 2023. History of treatment toward persons with psychiatric disabilities. *The Psychological and Social Impact of Chronic Illness and Disability*, p.37.
75. Nishikawa-Pacher, A., 2022. Research questions with PICO: a universal mnemonic. *Publications*, 10(3), p.21.
76. O'Reilly, M., Kiyimba, N. and Drewett, A., 2021. Mixing qualitative methods versus methodologies: A critical reflection on communication and power in inpatient care. *Counselling and psychotherapy research*, 21(1), pp.66-76.
77. Olawande, T.I., Ajayi, M.P., Amoo, E.O. and Iruonagbe, C.T., 2019. Variations in family attitudes towards coping with people living with mental illness. *Open access Macedonian journal of medical sciences*, 7(12), p.2010.
78. Olorunfemi, Olaolorunpo, David Idenyi AGBO, Omotayo Mercy Olorunfemi, and Esther Odogho Okupapat. "Impact of the emigration of nurses on health care delivery system in selected hospitals, Benin-City, Edo State, Nigeria." *Journal of Integrative Nursing* 2, no. 3 (2020): 110-115.
79. O'Connor, R.C., Worthman, C.M., Abanga, M., Athanassopoulou, N., Boyce, N., Chan, L.F., Christensen, H., Das-Munshi, J., Downs, J., Koenen, K.C. and Moutier, C.Y., 2023. Gone Too Soon: priorities for action to prevent premature mortality associated with mental illness and mental distress. *The Lancet Psychiatry*, 10(6), pp.452-464.
80. Okazaki, S. and Sue, S., 2016. Methodological issues in assessment research with ethnic minorities. <https://doi.org/10.1037/14805-015>
81. Okafor, I.P., Oyewale, D.V., Ohazurike, C. and Ogunyemi, A.O., 2022. Role of traditional beliefs in the knowledge and perceptions of mental health and illness amongst rural-dwelling women in western Nigeria. *African journal of primary health care & family medicine*, 14(1), pp.1-8.
82. Odilibe, I.P., Akomolafe, O., Arowoogun, J.O., Anyanwu, E.C., Onwumere, C. and Ogugua, J.O., 2024. Mental health policies: a comparative review between the USA and African nations. *International Medical Science Research Journal*, 4(2), pp.141-157.
83. Ojobo, V. and Ekele, F., 2023. The influence of demographic factors on adolescents' knowledge and attitudes towards mental illness in Makurdi metropolis. *BLUESLAND JOURNAL OF ARTS AND SOCIAL SCIENCE*, 1(1).
84. Olagundoye, Olawunmi, Victor Akhuemokhan, and Morenike Alugo., 2017: "Towards caring for caregivers: assessing the burden of care and experience of associative stigma among caregivers of patients with chronic mental illnesses at a mental health care facility in Lagos Metropolis, Nigeria." *Family Medicine & Primary Care Review* 19, no. 2 149-155.
85. Okpalauwaekwe, U., Mela, M. and Oji, C., 2017. Knowledge of and attitude to mental illnesses in Nigeria: a scoping review. *Integr J Glob Health*, 1(1), p.5.
86. Owofe, A. B (2024), The Economic Impact of Mental Health Illness and Public Perceptions: A Critical Investigation of the Nigerian State, *International Journal for Multidisciplinary Research (IJFMR)* - IJFMR Volume 6, Issue 1, January-February 2024. <https://doi.org/10.36948/ijfmr.2024.v06i01.13084>

87. Pederson, A.B., Konadu Fokuo, J., Thornicroft, G., Bamgbose, O., Ogunnubi, O.P., Ogunsola, K. and Oshodi, Y.O.,(2023. Perspectives of university health care students on mental health stigma in Nigeria: Qualitative analysis. *Transcultural Psychiatry*, 60(2), pp.272-285.
88. Pescosolido, B.A. and Martin, J.K., 2015. The stigma complex. *Annual review of sociology*, 41(1), pp.87-116.
89. Persaud, A., Day, G., Gupta, S., Ventriglio, A., Ruiz, R., Chumakov, E., Desai, G., Castaldelli-Maia, J., Torales, J., Juan Tolentino, E. and Bhui, K., 2018. Geopolitical factors and mental health I. *International journal of social psychiatry*, 64(8), pp.778-785.
90. Peters, M. D. J., Godfrey, C. M., Khalil, H., McInerney, P., Parker, D., & Soares, C. B. (2015). Guidance for conducting systematic scoping reviews. *International Journal of Evidence-Based Healthcare*, 13(3), 141-146.\*
91. Pederson, A.B., Burnett-Zeigler, I., Fokuo, J.K., Wisner, K.L., Zumpf, K. and Oshodi, Y., (2020). Mental health stigma among university health care students in Nigeria: a cross-sectional observational study. *Pan African medical journal*, 37(1).
92. Patino, C.M. and Ferreira, J.C., 2018. Inclusion and exclusion criteria in research studies: definitions and why they matter. *Jornal Brasileiro de Pneumologia*, 44, pp.84-84.
93. Rudloff, P. and Vinson, L.T., 2023. Surveys in communities divided by ethnicity and conflict: Challenges, possible solutions, and lessons learned from a survey in Jos, Nigeria. *Sociological Methods & Research*, 52(3), pp.1340-1367.
94. Randolph, J., 2019. A guide to writing the dissertation literature review. *Practical assessment, research, and evaluation*, 14(1), p.13.
95. Singer, E. and Couper, M.P., 2017. Some methodological uses of responses to open questions and other verbatim comments in quantitative surveys. *Methods, data, analyses: a journal for quantitative methods and survey methodology (mda)*, 11(2), pp.115-134.
96. Soyannwo, T., Adebayo, A.M. and Sigbeku, O., 2020. Mental health problems of reproductive age group women in a rural community of south west Nigeria. *Journal of Mental Health*.
97. Smith, B., 2018. Generalizability in qualitative research: Misunderstandings, opportunities and recommendations for the sport and exercise sciences. *Qualitative research in sport, exercise and health*, 10(1), pp.137-149.
98. Sadan, V., 2017. Data collection methods in quantitative research. *Indian Journal of Continuing Nursing Education*, 18(2), pp.58-63.
99. Schreier, M., 2018. Sampling and generalization. *The SAGE handbook of qualitative data collection*, pp.84-97.
100. Snyder, H., 2019. Literature review as a research methodology: An overview and guidelines. *Journal of business research*, 104, pp.333-339.
101. Scheid, T.L. and Wright, E.R. eds., 2017. *A handbook for the study of mental health*. Cambridge University Press.1,pp.6-20\*.
- 102..The World Counts (2024), World Population, Population of Nigeria. [online] Available at: <https://www.theworldcounts.com/populations/countries/nigeria>. Accessed June 12, 2024.
103. Tripathi, M., Kumar, S., Sonker, S.K. and Babbar, P., 2018. Occurrence of author keywords and keywords plus in social sciences and humanities research: A preliminary study. *COLLNET Journal of Scientometrics and Information Management*, 12(2), pp.215-232.

104. Tesfaye, Y., Agenagnew, L., Terefe Tucho, G., Anand, S., Birhanu, Z., Ahmed, G., Getenet, M. and Yitbarek, K., 2020. Attitude and help-seeking behavior of the community towards mental health problems. *Plos one*, 15(11), p.e0242160.
105. Taquette, S.R. and Borges da Matta Souza, L.M., 2022. Ethical dilemmas in qualitative research: A critical literature review. *International Journal of Qualitative Methods*, 21, p.16094069221078731.
106. Theofanidis, D. and Fountouki, A., 2018. Limitations and delimitations in the research process. *Perioperative Nursing-Quarterly scientific, online official journal of GORNA*, 7(3 September-December 2018), pp.155-163.
107. Taguchi, N., 2018. Description and explanation of pragmatic development: Quantitative, qualitative, and mixed methods research. *System*, 75, pp.23-32.
108. Ugochukwu, O., Mbaezue, N., Lawal, S.A., Azubogu, C., Sheikh, T.L. and Vallières, F., 2020. The time is now: reforming Nigeria's outdated mental health laws. *The Lancet Global Health*, 8(8), pp.epppp989-e990.
109. Ubaka, C.M., Chikezie, C.M., Amorha, K.C. and Ukwe, C.V., 2018. Health professionals' stigma towards the psychiatric ill in Nigeria. *Ethiopian journal of health sciences*, 28(4).
110. Vasileiou, K., Barnett, J., Thorpe, S. and Young, T., 2018. Characterising and justifying sample size sufficiency in interview-based studies: systematic analysis of qualitative health research over a 15-year period. *BMC medical research methodology*, 18, pp.1-18.
111. Vaismoradi, M. and Snelgrove, S., 2019. Theme in qualitative content analysis and thematic analysis.
112. Vogel, T. and Wanke, M., 2016. *Attitudes and attitude change*. Psychology Press
113. Van de Vijver, F.J. and Leung, K., 2021. *Methods and data analysis for cross-cultural research* (Vol. 116). Cambridge University Press.
114. Vásquez, M.A., 2020. *More than belief: A materialist theory of religion*. Oxford University Press. Accessed August 30, 2024.
115. Wada, Y.H., Rajwani, L., Anyam, E., Karikari, E., Njikizana, M., Srour, L. and Khalid, G.M., 2021. Mental health in Nigeria: A neglected issue in public health. *Public Health in Practice*, 2, p.100166.
116. World Health Organization. (2024). Health topics, Mental health, [Mental health \(who.int\)](https://www.who.int/health-topics/mental-health). Accessed June 2nd, 2024.
117. World Health Organization. (2022). Health topics, Mental disorders. [Mental disorders \(who.int\)](https://www.who.int/health-topics/mental-disorders) Accessed June 2nd, 2024.
118. West, B.T. and Blom, A.G., 2017. Explaining interviewer effects: A research synthesis. *Journal of survey statistics and methodology*, 5(2), pp.175-211.
119. Yohani, S., Salami, B., Okeke-Ihejirika, P., Vallianatos, H., Alaazi, D. and Nsaliwa, C., 2020. "If You Say You Have Mental Health Issues, Then You Are Mad": Perceptions of Mental Health in the Parenting Practices of African Immigrants in Canada. *Canadian Ethnic Studies*, 52(3), pp.47-66.
120. Zhang, R., Wang, M.S., Toubiana, M. and Greenwood, R., 2021. Stigma beyond levels: Advancing research on stigmatization. *Academy of Management Annals*, 15(1), pp.188-222.

## Appendices Section

### Appendix 1

**Table 3: Search outcomes**

| Search strategy                                                                                                                               | Electronic databases and search results |         |        |        |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|---------|--------|--------|
| Adul* OR Grown-up OR Mature person OR Fully-grown AND Perception OR Understanding OR Attitudes OR Interpretation AND Mental illness OR Mental | Scopus                                  | Medline | CINAHL | PubMed |

|                                                                                                                                                                                    |         |        |        |        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|--------|--------|--------|
| disorder OR Mental health condition OR Psychiat* disability AND Manag* OR Care OR Treatment towards OR Behaviour towards AND NOT Child AND NOT Adolescence<br>Limit year 2015-2024 | 139,414 | 25,761 | 35,448 | 70,660 |
|                                                                                                                                                                                    | 86, 205 | 13,201 | 15,253 | 20,553 |
|                                                                                                                                                                                    | 2716    | 506    | 697    | 568    |
|                                                                                                                                                                                    | 230     | 124    | 135    | 182    |
|                                                                                                                                                                                    | 83      | 52     | 59     | 64     |

## Appendix 2

**Table 5: Study Characteristics**

| Author/s                                            | Title                                                                          | Publication year | Journal                            | Country | Setting               | Study design  | Objectives                                                                                                                                                | Inclusion criteria                                                           |
|-----------------------------------------------------|--------------------------------------------------------------------------------|------------------|------------------------------------|---------|-----------------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| Adebiyi, Fagbola, Olakehinde and Ogunniyi           | Enacted and implied stigma for dementia in a community in south-west Nigeria   | 2016             | Journal of psychogeriatrics        | Nigeria | community in Nigeria  | Mixed methods | The study investigates the occurrence of implied and enacted stigma for people with dementia and assessed the attitudes of people towards dementia        | on the basis of stigmatization of people with dementia due to poor awareness |
| Jidong, Ike, Tribe, Tunariu, Rohleder and Mackenzie | Berom cultural beliefs and attitudes towards mental health problems in Nigeria | 2022             | Mental Health religion and Culture | Nigeria | Plateu state, Nigeria | Mixed methods | The study used cultural identity model of understanding of tribal language and culture as predictors to look into attitude towards mental health problems | It explored cultural beliefs and attitudes towards mental health problems    |

|                                                                                           |                                                                                                                                                                              |      |                                                           |         |                       |                         |                                                                                                                                                                                        |                                                                                                        |
|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------------------------------------------------------|---------|-----------------------|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| Lawal, Adedeji, Ogunniyi and Henderson                                                    | Social domains of poor mental health, a qualitative study of community stakeholders understanding and demarcation of mental illness and its interpretation in rural Nigeria. | 2024 | Health Science Reports                                    | Nigeria | Rural Nigeria         | Qualitative descriptive | To explore community stakeholders understanding and discrimination against mental illness with the aim of shaping stakeholders support towards people enduring mental illness.         | On the basis of understanding and interpretation of mental illness                                     |
| Akinsulore, Esimai, Mapayi and Aloba                                                      | Public awareness and attitude towards depression, a community-based study among an adult population in Ile-Ife south western Nigeria                                         | 2018 | Community Mental health Journal                           | Nigeria | South-western Nigeria | Cross sectional-survey  | The study assesses the level of public awareness and attitude towards depression in a semi-urban Nigeria community                                                                     | On the basis of awareness and attitude towards a mental disorder                                       |
| Jidong, Hussain M, Ike, Hussain N, Taru, Nnaemeka, Francis, Jack, Mwankon, Xue and Pwajok | Bipolar disorders in Nigeria, a mixed-methods study of patients, family caregivers, clinicians, and the community members' perspectives.                                     | 2023 | International journal of Bipolar disorders                | Nigeria | Nigeria               | Mixed methods           | The study utilised a mixed methods design to evaluate public knowledge of BDs, the lived experiences of patient with BD'S and clinicians' experiences of working with bipolar disorder | It talks about a mental disorder and experience of patient                                             |
| Okafor, Oyewale, Ohazurike, and Ogunyemi                                                  | Role of traditional beliefs in the knowledge and perception of mental illness amongst rural-dwelling women in western Nigeria                                                | 2022 | African Journal of primary healthcare and family medicine | Nigeria | Rural-dwelling women  | Cross sectional-survey  | To assess rural women's knowledge, perceptions and attitudes regarding mental illnesses and the role of traditional beliefs in their management                                        | It explored women's knowledge, perception, attitudes, and traditional beliefs regarding mental illness |

|                                                                       |                                                                                                             |      |                                  |         |            |                        |                                                                                                                                                                         |                                                                      |
|-----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|------|----------------------------------|---------|------------|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|
| Mojiminiyi, Balogun and Ogunnowo                                      | Knowledge and attitude towards mental disorders among adults in south-west Nigeria                          | 2020 | Malawi Medical Journal           | Nigeria | Nigeria    | Cross sectional-survey | To assess the knowledge of adults residing in an urban area of south-west Nigeria, with regards to mental health and investigate their attitudes towards the condition. | It focusses on adults living in urban area.                          |
| Anosike, Igboeli, Ukwe and Okani                                      | Comparative survey of beliefs about mental illness among pharmacy and non-pharmacy of a Nigerian university | 2019 | Mental Health & Social Inclusion | Nigeria | University | Cross sectional-survey | To assess and compare beliefs about mental illness among pharmacy and non-pharmacy students.                                                                            | University students' beliefs about mental illness                    |
| Pederson, Konadu, Thomicroft, Bamgbose, Ogunnubi, Ogunsola and Oshodi | Perspectives of university health care students on mental health stigma in Nigeria.                         | 2023 | Transcultural Psychiatry         | Nigeria | University | Qualitative analysis   | The study aims to understand the factors that underline stigma around mental illness                                                                                    | University health care student's conceptualization of mental illness |

Appendix 3- Table 6: Methodological characteristics of included qualitative findings.

| Authors                                | Sample | Demographics    | Method of data collection        | Types of analysis | Qualitative findings on factors that shape public perception and management of mental illness in Nigeria.                           |
|----------------------------------------|--------|-----------------|----------------------------------|-------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Lawal, Adedeji, Ogunniyi and Henderson | 12     | age 35-75 years | In depth interviews, focus group | Thematic          | Findings from the participants ascribed understanding and causes of mental illness as hereditary, behavioural and spiritual causes. |

|                                                                                           |                            |                                       |                            |          |                                                                                                                                                                                                                                                                                                                                          |
|-------------------------------------------------------------------------------------------|----------------------------|---------------------------------------|----------------------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pederson, Konadu, Thornicroft, Bamgbose, Ogunnubi, Ogunsola and Oshodi                    | 82                         | age 18-65 years                       | Focus group                | Thematic | Eight themes were identified: (1). participants attributed mental illness to spiritual, religion and supernatural, (2) discrimination, (3) stigmatization. (4) Individual character, (5) ways of reducing stigma, (6) shortage of practitioners and limited resources, (7) violent in nature, (8) Isolation, rejection and bad treatment |
| Jidong, Hussain M, Ike, Hussain N, Taru, Nnaemeka, Francis, Jack, Mwankon, Xue and Pwajok | 15                         | age 25-44 years                       | semi-structured interviews | Thematic | Participants perceived bipolar disorders as inherited and psychosocial in nature, and despite psychotropic medications, cultural and religious beliefs are impediment to treatment.                                                                                                                                                      |
| Adebiyi, Fagbola, Olakehinde and Ogunniyi                                                 | 6 groups of 8 participants | age 18-75 years                       | Focus group                | Thematic | statements from the participants identified presence of enacted stigma and scorn in the treatment of people with dementia in the community                                                                                                                                                                                               |
| Jidong, Ike, Tribe, Tunariu, Rohleder and Mackenzie                                       | 13                         | Seven laypeople and Six practitioners | semi-structured interviews | Thematic | Four themes identified: Cultural beliefs attribution of mental illness to being caused by spiritual forces, preference for traditional healing, prayers and Christian religious healing and perception of trained practitioners of laypeople.                                                                                            |

**Table 7: Methodological characteristics of included quantitative findings**

| Authors                              | Sample | Demographics                                                                                                  | Data collection method | Types of analysis                                                              | Quantitative findings on factors that shape public perception and management of mental illness in Nigeria                                                                                                                                                        |
|--------------------------------------|--------|---------------------------------------------------------------------------------------------------------------|------------------------|--------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Akinsulore, Esimai, Mapayi and Aloba | 240    | They were less than 45 years, mean age of 34.7 years, 58.5% males, 51.2% were married, 79.3% were Christians, | Questionnaire          | Descriptive statistics. Statistical package for social science software (SPSS) | Heard about depression (n = 174), overall negative attitude towards depression (n = 102), overall positive attitude (n = 72), people with depression are dangerous to others (n = 70), difficult to talk to (n = 83), should pull themselves together (n = 151). |

|                                           |     |                                                                                                                             |                                        |                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------------------------|-----|-----------------------------------------------------------------------------------------------------------------------------|----------------------------------------|-------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                           |     | 45.4% were self employed                                                                                                    |                                        |                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Okafor, Oyewale, Ohazurike, and Ogunyemi  | 253 | Adult women, half were less than 35 years (52.18%), mean age of 37.11 years, married 65.61%, Muslims 50.59%, Yoruba 67.98%. | Questionnaire                          | Descriptive statistics. Epi info statistical package. | Good knowledge of mental illness (n = 89), poor knowledge (n = 164), negative attitude towards mental health (n = 186), positive attitude (n = 67), evil spirits cause mental illness (n = 160), supernatural causes (n = 154), ancestral causes as a result of past sins (n = 106).                                                                                                                                                                     |
| Anosike, Igboeli, Ukwé and Okani          | 637 | age 18-25 years, Pharmacy students (43.0%), female (71.4%).                                                                 | Questionnaire                          | Descriptive statistics                                | Mentally ill person are likely to harm others (n = 535), it takes longer to recover from mental illness than other diseases (n = 452), stay away from mentally ill person because their behaviour is dangerous (n = 374), embarrassed if family member is mentally ill (n = 284), afraid of what boss, friend or family will think if diagnosed with mental disorder (n = 371), people will not knowingly be friends with mentally ill person (n = 398). |
| Mojiminiyi, Balogun and Ogunnowo          | 242 | age 21-30 years, mean age is 33.1 years, male (52.9%), married (52.1%), Christian (76.9%).                                  | structured questionnaire               | Descriptive statistics. Epi info statistical package. | Poor knowledge of mental disorders (n = 124), good knowledge (n = 14), fair knowledge (n = 104), People with mental disorder should not be given any responsibility (n = 119), avoid them (n = 118), will advise people with mental illness to visit pastor or Imam (n = 163), advise to visit traditional healer (n = 86).                                                                                                                              |
| Adebiyi, Fagbola, Olakehinde and Ogunniyi | 313 | age- 20 years and above, 60 years and older (54%), women (57.5%), married (73.2%), no formal education (42.5%).             | Interviewer-administered questionnaire | Descriptive statistics                                | Heard of dementia (n = 211), prefer not to let others know they have dementia (n = 76), ashamed if they have dementia (n = 76), will not marry into families of people with dementia (n = 51), family believe they should limit interactions of with public (n = 51).                                                                                                                                                                                    |