

Determinants of Continued Mental Health Service Utilisation Among Psychiatric Patients in Southwest Nigeria Using a Mixed Methods Approach

Omowunmi Omolara Badero

University of Ibadan

Henry Osaro Aisagbonhi

henry.aisagbonhi@hotmail.com

University of Ibadan

Research Article

Keywords: Mental health service utilization, Cultural beliefs, Psychiatric outpatients, Access barriers, Nigeria

Posted Date: September 8th, 2026

DOI: <https://doi.org/10.21203/rs.3.rs-10562102/v1>

License: © ⓘ This work is licensed under a Creative Commons Attribution 4.0 International License. [Read Full License](#)

Additional Declarations: No competing interests reported.

Abstract

Background

Mental health service utilization remains suboptimal in low- and middle-income countries, where structural and socio-cultural barriers coexist. However, the relative influence of these barriers on continued utilization among patients already engaged in care remains insufficiently understood. This study identified the determinants of mental health service utilization among psychiatric outpatients attending tertiary neuropsychiatric institutions in Southwest Nigeria.

Methods

A cross-sectional mixed-methods study was conducted among 271 psychiatric outpatients selected through systematic sampling from two tertiary neuropsychiatric hospitals. Data were collected using a structured interviewer-administered questionnaire and analyzed using descriptive statistics, chi-square tests, and multivariable logistic regression. Qualitative responses were subjected to thematic analysis to complement the quantitative findings.

Results

Financial barriers were the most frequently reported challenge (57.6%), followed by geographic barriers (36.2%) and waiting-time constraints (32.1%). Most respondents reported awareness of mental health services (82.3%) and intended to seek care (82.3%), although 27.3% endorsed supernatural explanations for mental illness. Rural residence was significantly associated with greater access-related barriers ($\chi^2 = 9.58, p = 0.048$). Community judgement ($\chi^2 = 20.03, p = 0.010$) and supernatural beliefs ($\chi^2 = 16.90, p = 0.031$) were significantly associated with service utilization. In multivariable analysis, supernatural belief remained the only independent predictor of utilization (AOR = 0.39, 95% CI: 0.17–0.86, $p = 0.020$), whereas socioeconomic status, knowledge, stigma, institutional factors, and geographic accessibility were not independently associated with continued service utilization. Qualitative findings reinforced the influence of financial constraints, long travel distances, prolonged waiting times, stigma, and preference for spiritual or traditional healing pathways.

Conclusion

Continued mental health service utilization was influenced more by culturally embedded belief systems than by structural barriers alone. Strengthening culturally responsive interventions alongside improvements in affordability, accessibility, and community engagement may enhance sustained utilization of mental health services in resource-constrained settings.

INTRODUCTION

The use of mental health services remains critically insufficient worldwide (1), and the gap between those who need care and those who actually receive it is widest in low- and middle-income countries (LMICs), where structural limitations and socio-cultural influences often coexist. In these settings, people frequently face barriers that extend beyond the availability of treatment, making access to care both complex and unequal. At the health-system level,

evidence shows that economic capacity and political commitment strongly influence the strength and responsiveness of mental health services (2), thereby sustaining marked differences in access and outcomes across countries.

Understanding why people use or fail to use mental health services therefore requires looking beyond the health system itself. The Andersen Behavioral Model of Health Service Use³ and the Theory of Planned Behavior (4) together explain that service utilization is shaped by the interaction of predisposing, enabling, and need-related factors. In practice, this means that an individual's knowledge, beliefs, and attitudes, together with social influences such as stigma and the availability, affordability, and quality of care, all contribute to the decision to seek treatment. In mental health, these influences are further shaped by culturally rooted explanations of illness, which affect how symptoms are interpreted and whether individuals choose biomedical or non-medical forms of care. People enter the mental health system with their own values, belief systems, and cultural backgrounds, and these factors influence both how they present their symptoms and what they expect from treatment (5). Consequently, utilization depends not only on service availability but also on whether the health system provides care that aligns with patients' beliefs and expectations.

Research across LMICs has consistently shown that structural barriers remain major obstacles to mental health service utilization. High treatment costs, limited insurance coverage, and substantial out-of-pocket payments continue to widen the treatment gap (1),(2),(6). These financial challenges are often reinforced by broader health-system weaknesses, including inadequate workforce incentives and limited opportunities for professional development, which may reduce both service availability and quality (7). Geographic access presents another challenge, particularly for rural populations where mental health services are concentrated in urban tertiary facilities (8). Alongside these structural barriers, stigma continues to discourage help-seeking because many individuals fear discrimination and social exclusion (1),(2),(6),(9). Its effects extend beyond public attitudes, reducing self-esteem and limiting social opportunities that support continued treatment (10-12). Even among groups with a high risk of mental health problems, such as first responders, stigma may delay care-seeking (13). Cultural beliefs also play an important role, as supernatural or spiritual explanations for mental illness often encourage individuals to seek help from traditional or faith-based providers rather than formal mental health services (5),(14),(15).

Although these determinants are well recognized, an important question remains unanswered. Much of the existing literature focuses on barriers that prevent people from entering care, yet far less attention has been given to the factors that influence continued utilization once patients have already accessed services. Structural barriers are often assumed to predict utilization, but this assumption has rarely been tested among people who are already receiving treatment. Emerging evidence suggests that some individuals continue using mental health services despite financial hardship, long travel distances, or stigma, indicating that these barriers may be necessary but not sufficient to explain utilization behavior. Likewise, while policy initiatives such as integrating mental health into primary healthcare have improved access in Nigeria (16), it remains uncertain whether these improvements lead to sustained service utilization. The relative influence of cultural beliefs compared with structural constraints is also poorly understood, and quantitative findings are seldom integrated with qualitative evidence to explain how reported barriers shape actual patterns of service use, particularly in tertiary mental health settings where patients have already overcome the initial challenge of access (17). This knowledge gap is especially relevant in Nigeria, where mental health services are highly centralized and coexist with pluralistic systems of care, yet most studies have concentrated on community-level barriers or intentions to seek care (17) rather than on the determinants of sustained engagement with formal mental health services.

Purpose of the study

Against this background, this study examined the barriers to mental health service utilisation among patients attending two federal neuropsychiatric hospitals in South-West Nigeria, whose large, diverse catchment populations make their utilisation patterns of substantial policy relevance. It had four objectives. The first was to identify and categorise the major barriers to mental health service utilisation as perceived by patients attending these institutions. The second was to examine the relationship between patients' sociodemographic characteristics and their patterns of service utilisation. The third was to assess the influence of institutional factors, including affordability, waiting time, staff attitudes, and the physical environment, on utilisation patterns. The fourth was to evaluate the role of cultural beliefs, social norms, and stigma in patients' decisions to seek and continue with mental health services. It was hypothesized that culturally rooted beliefs, alongside structural and individual-level factors, play an important role in shaping patterns of mental health service utilization. The findings are intended to inform policy and programmatic responses aimed at improving access to, and retention within, tertiary mental health care in Nigeria and comparable settings.

METHODS

Study design

A descriptive, cross-sectional design with both quantitative and qualitative components was adopted, so that several dimensions of the problem could be captured in one contact with each participant and repeat visits avoided.

Study area

The study was conducted at two federal tertiary neuropsychiatric institutions in South-West Nigeria: Federal Neuropsychiatric Hospital, Aro, Abeokuta (Ogun State), established in 1954, and Federal Neuropsychiatric Hospital, Yaba, Lagos (Lagos State), established in 1907. Both were purposively selected as the zone's premier referral centres for complex psychiatric cases and for their contrasting settings – semi-urban Aro and densely urban Yaba. Data were collected during routine outpatient clinic days between August and December 2025.

Study participants

Participants were adult outpatients of the two facilities, with primary caregivers included where relevant. To be eligible, a person had to be at least 18, to have attended the clinic regularly for two months or more, to be clinically stable and able to give informed consent, and to communicate in English, Yoruba, or Pidgin. Those in acute crisis needing emergency care, those who spoke none of the three study languages, and those who declined or later withdrew were not enrolled.

Sample size determination

The minimum sample size was determined using Cochran's (1963) formula for cross-sectional studies:

$$n = (Z^2 \times p(1 - p)) / d^2$$

In this expression n is the required minimum sample, Z the standard normal deviate at the 95% confidence level (1.96), p the assumed prevalence of the characteristic of interest (0.8, taken from earlier Nigerian reports of high barrier prevalence), and d the tolerated margin of error (0.05). Entering these values gives:

$$n = ((1.96)^2 \times 0.8 \times 0.2) / (0.05)^2 = 0.6147 / 0.0025 \approx 246 \text{ participants}$$

Inflating this by 10% to allow for non-response and incomplete returns ($24.6 \approx 25$) produced a target of 271, divided almost evenly between the sites (135 at Aro, 136 at Yaba).

Sampling Technique

A two-stage sampling procedure was employed. First, purposive sampling was used to select the study sites based on predefined criteria including service capacity and geographic representation. Second, systematic sampling was applied within each facility. Eligible patients were assigned sequential numbers from clinic registers, and a sampling interval ($k = 3$) was determined by dividing average daily patient attendance (50) by required daily sample size (20). Every third eligible patient was recruited until daily quotas were met.

Data Collection Instruments

A semi-structured questionnaire consisting of eight sections: Sociodemographic characteristics, Knowledge and awareness, Attitudes and beliefs, Cultural and social influences, Institutional barriers, Social support and norms, perceived behavioral control and Service utilization patterns was used to collect the data; the instrument included adapted validated scales contextualized to Nigeria through literature review and expert consultation. Questionnaire is provided as Supplementary Material S2.

Reliability and validity of the research instrument

Content and face validity were assessed by the project supervisor and senior faculty at the Department of Health Policy and Management, University of Ibadan. A pilot study (7 August 2025) with 30 participants (~10% of the planned sample) assessed feasibility and reliability; completion took 30–35 minutes, one item was minimally rephrased, and internal consistency was acceptable (Cronbach's $\alpha \geq 0.82$).

Measurement of Variables

Mental health service utilization was defined as a binary outcome based on appointment attendance and medication adherence, categorized as adequate ($\geq 80\%$) or inadequate ($< 80\%$). A secondary outcome, barrier score, was constructed as a composite index of institutional, cultural, social, and economic factors and classified into tertiles (low, moderate, high).

Explanatory variables included key domains: socioeconomic status (income level), geographic accessibility (residence and perceived ease of access), stigma (high vs low), knowledge of mental health (good vs poor), cultural beliefs (endorsement of supernatural causes), and institutional factors (affordability, waiting time, staff attitude, and hospital environment). All variables were operationalized as binary indicators.

Full variable definitions, coding schemes, and measurement details are provided in the Supplementary Material S1.

Potential Confounders and Effect Modifiers

Age, sex, education, employment status, and distance to facility were considered potential confounders. These variables were controlled in multivariable regression models.

Data Collection and Management

Face-to-face interviewer-administered surveys were conducted in outpatient clinics. After eligibility screening, participants received study information and provided written informed consent. Interviews were conducted in

English, Yoruba, or Pidgin English. Trained research assistants read questions verbatim and recorded responses. Completed questionnaires were checked immediately for completeness and stored securely.

Five trained research assistants (health sciences background) underwent a structured three-hour training covering study objectives, standardized interviewing, ethical considerations, and distress management. Competency was verified through role-play and pilot interviews.

Data were anonymized using unique identification codes. Paper questionnaires were first inputted into Kobotool before stored in locked cabinets, while electronic data were encrypted and password-protected. Missing data below 10% were handled using mean (continuous) or mode (categorical) imputation. Cases with >10% missing data were excluded.

Data Analysis

Data analysis was conducted using IBM SPSS Statistics version 26.0 (IBM Corp., Armonk, NY, USA). Descriptive statistics, bivariate analysis and multivariable analysis were conducted.

All variables were entered simultaneously into the model. Statistical significance was set at $p < 0.05$.

Qualitative responses were analyzed using thematic content analysis. Codes were developed inductively, grouped into themes, and aligned with the conceptual framework. Discrepancies were resolved through consensus.

Bias and Confounding Control

Selection bias was minimized using systematic sampling. Information bias was reduced through standardized interviewer training and validated instruments. Confounding was addressed through multivariable logistic regression adjustment.

Eligibility Criteria

Inclusion Criteria: Adults aged ≥ 18 years, attending clinic for at least two months, mentally stable and capable of informed consent and able to communicate in English, Yoruba, or Pidgin

Exclusion Criteria: Patients with acute psychiatric emergencies, communication barriers and refusal or withdrawal of consent

Ethical Considerations

Before any data were gathered, the study received ethical approval from the Research Ethics Committees of Federal Neuropsychiatric Hospital, Aro (PRO022/25) and Federal Neuropsychiatric Hospital, Yaba (FNPHY/HREC/2025/001/07/45). Every participant gave written informed consent beforehand, having received a written information sheet and a verbal explanation in their preferred language, an opportunity to ask questions, and confirmation that participation was voluntary. Confidentiality was protected through unique identification codes, restricted access, locked and encrypted storage, and aggregate reporting; research assistants signed confidentiality agreements. The study involved no invasive procedures, and any participant who became distressed was referred to on-site clinical staff.

RESULTS

Respondents were predominantly young to middle-aged adults, with most aged 18–50 years, slightly more females than males, and nearly half married. Over half had tertiary education, while a majority earned ≤ ₦100,000 monthly and resided in urban areas. These characteristics defined the socioeconomic and demographic profile of the study population (Table 1).

Most respondents demonstrated awareness of service availability and moderate knowledge of mental health disorders. A notable proportion endorsed supernatural causation and institutionalization beliefs. Stigma-related attitudes were prominent, including avoidance of discussing mental health and perceived community judgment. Despite this, intention to seek care and confidence in accessing services remained high. Institutional perceptions indicated concerns about affordability and waiting time, while staff attitude and hospital environment were largely rated positively (Table 2).

Socioeconomic status (income) showed no significant association with financial barriers, indicating uniform cost-related challenges. Rural residence was significantly associated with greater waiting time and access barriers. Educational level was not significantly associated with stigma, openness, or community perception. Institutional factors (affordability, waiting time, staff attitude, and environment) were not significantly associated with utilization. Among cultural variables, community judgment and supernatural beliefs showed significant associations with utilization, while other stigma and social support variables were not significant (Table 3).

Only supernatural belief remained a significant predictor of mental health service utilization, with reduced likelihood of adequate utilization among those endorsing such beliefs. All other variables, including income, residence, stigma, knowledge, institutional factors, and accessibility, were not statistically significant (Table 4)

Qualitative Findings

The Qualitative narratives provided contextual support for quantitative findings, particularly the significant associations with geographic barriers ($p = 0.048$) and supernatural beliefs ($p = 0.031$). Financial constraints emerged as the most dominant barrier, driven by high out-of-pocket costs and absence of insurance coverage: *"The cost of treatment and medications is too expensive. Sometimes I cannot afford the prescribed drugs and have to skip doses."* *"Transportation fare from my area to the hospital is very costly."* *"I have to pay for consultation, laboratory tests, and drugs all out of pocket. No insurance covers mental health."*

Geographic barriers reflected long travel distances and centralized services: *"I come from Badagry and it takes me almost 3 hours to reach the hospital."* *"The facility is too far from where I live. There is no mental health service close to my community."*

System-level constraints included prolonged waiting times and overcrowding: *"I wait for 3-4 hours every time before seeing the doctor."* *"There are too many patients and not enough doctors. The facility is always overcrowded."*

Stigma and discrimination influenced concealment: *"People treat me differently when they learn I am receiving mental health treatment."* *"I am afraid to tell anyone. The stigma and shame of being called 'mad' makes me hide my treatment."*

Family-related barriers highlighted preference for alternative care: *"My family does not believe in mental illness. They think I just need to pray more."* *"Family members prefer taking me to prayer houses and traditional healers instead of supporting hospital treatment."*

Institutional issues included staff attitudes and medication shortages: *"Some staff treat mental health patients with disrespect and impatience."* *"Sometimes the medications I need are out of stock and I have to go to private pharmacy."*

Overall, these themes demonstrated that barriers to mental health service utilization were multidimensional, spanning economic, geographic, social, and health system domains. Financial and geographic constraints were the most prominent, while institutional barriers were least reported. These qualitative findings aligned with quantitative patterns, particularly the influence of geographic access and cultural factors on utilization (Table 5) .

DISCUSSION

This study examined the determinants of continued mental health service utilization among patients receiving tertiary psychiatric care in Southwest Nigeria using a mixed-methods approach. The principal finding was that, although financial, geographic, institutional, and stigma-related barriers were widely experienced, only culturally rooted beliefs, particularly supernatural explanations of mental illness, independently predicted continued utilization. This finding extends current understanding of mental health service utilization by demonstrating that barriers influencing initial access may differ from those sustaining engagement after patients enter formal care. The integration of quantitative and qualitative findings further showed that barriers operate simultaneously at individual, interpersonal, community, and health-system levels, but differ in their relative influence on utilization behavior.

The qualitative findings confirmed that structural barriers remain important challenges for psychiatric patients. Participants consistently reported transportation costs, consultation fees, long-term medication expenses, and travel distances resulting from the concentration of specialist psychiatric services in urban centres. These findings are consistent with previous reports identifying financial constraints as major barriers to mental healthcare access in LMICs (6),(18). Similar evidence from Pakistan, Rwanda, and other African settings has shown that direct treatment costs, transport expenses, inadequate insurance coverage, and limited-service availability continue to restrict access to mental healthcare (19)(20)(21)(22)(23). Likewise, studies from rural Nigeria reported that out-of-pocket payments remain a major obstacle to seeking psychiatric care (24). McGinty et al. further argued that persistent treatment gaps reflect both financial constraints and broader health-system implementation challenges (25). However, unlike previous studies, structural barriers did not independently predict continued utilization in the present study, suggesting that patients already engaged in care may develop coping mechanisms or prioritize treatment despite financial and geographical difficulties. This finding supports the distinction between access and utilization, reinforcing the argument that while service availability creates opportunities for care (8), sustained utilization depends on additional enabling factors (26).

The most important contribution of this study was the identification of cultural beliefs as the only independent predictor of continued mental health service utilization. Consistent with Kleinman's explanatory model (27), participants' beliefs about the causes of mental illness continued to shape treatment decisions even after entering formal psychiatric care. Family pressure to seek spiritual or traditional healing further illustrated the enduring influence of cultural expectations throughout the treatment journey. This finding agrees with evidence that supernatural interpretations of mental illness remain common across sub-Saharan Africa and are consistently associated with preference for traditional and faith-based healing (28). Similar observations have been reported in Nigeria, where cultural beliefs delay engagement with biomedical services (29), and in South Africa, where traditional explanatory models continue to influence treatment preferences (30)(31). Comparable findings from India further demonstrate that culturally determined beliefs shape pathways to psychiatric care (32). Collectively, these studies suggest that cultural beliefs are not merely barriers to initial access but enduring determinants of continued treatment behaviour.

The finding that stigma did not independently predict continued service utilization adds an important perspective to existing evidence. Although stigma was commonly reported through fear of discrimination, community judgement, and reluctance to disclose mental illness, it did not significantly reduce utilization. This contrasts with studies identifying stigma as a major barrier to help-seeking (12), with previous reports describing stigma as a significant deterrent to accessing mental healthcare (10)(13). However, more recent evidence suggests that stigma may influence disclosure and attitudes toward treatment more than continued service utilization once individuals recognize the need for care (33)(34). Similarly, a recent systematic review concluded that stigma negatively affects treatment experiences and recovery but does not necessarily prevent sustained engagement with psychiatric services (35). The present findings therefore suggest that patients may continue treatment because of illness severity or perceived therapeutic benefit while concealing their condition to avoid discrimination.

Institutional factors showed limited predictive influence, despite participants reporting challenges related to service delivery. This differs from studies emphasizing service quality and provider attitudes as important determinants of utilization (36). A likely explanation is that the study population comprised patients already receiving tertiary psychiatric care, thereby reducing variation in institutional exposure. Consequently, institutional factors may be more influential in facilitating entry into care than in determining continued utilization.

Strengths and Limitations

The mixed-methods design was a major strength, enabling integration of quantitative findings with patients lived experiences and providing a more comprehensive understanding of service utilization. Multivariable analysis strengthened the findings by accounting for potential confounders, while qualitative interviews explained the observed relationships. However, the cross-sectional design limits causal inference, and restricting the study to patients already attending tertiary facilities may have excluded individuals facing the greatest barriers to accessing care. In addition, self-reported information on stigma and cultural beliefs may have been influenced by recall and social desirability bias.

Implications and Recommendations

The findings indicate that improving mental health service utilization requires interventions that extend beyond expanding services or reducing financial barriers. While structural reforms remain essential, culturally responsive strategies that address prevailing beliefs about mental illness should be integrated into routine mental healthcare. Community education, collaboration with traditional and religious leaders, culturally competent provider training, expansion of financial protection mechanisms, and decentralization of mental health services are likely to improve both access and sustained engagement. Future longitudinal and community-based studies should distinguish determinants of initial access from those influencing continued utilization.

CONCLUSION

Using a mixed-methods approach, this study demonstrated that although financial, geographical, institutional, and stigma-related barriers remain common among psychiatric patients in Southwest Nigeria, culturally rooted beliefs were the strongest determinant of continued mental health service utilization. These findings suggest that improving utilization requires culturally informed interventions alongside ongoing structural reforms to strengthen equitable access, continuity of care, and long-term engagement with formal mental health services (Fig. 1).

Declarations

Ethics Approval and Consent to Participate: This study received ethical approval from the Research Ethics Committees of Federal Neuropsychiatric Hospital, Aro (PRO022/25) and Federal Neuropsychiatric Hospital, Yaba (FNPHY/HREC/2025/001/07/45). All human-related procedures were performed in accordance with relevant institutional guidelines and the declaration of Helsinki. Informed consent was obtained from all participants prior to data collection.

Consent to participate:

Consent to Publish: Not applicable

Clinical Trial Number: Not Applicable

Data Availability: The datasets generated and/or analyzed during the current study are available from the corresponding author on reasonable request.

Acknowledgements:

We sincerely appreciate all the patients and their caregivers who participated in this study. We also express our profound gratitude to the management and staff of the **Federal** Neuropsychiatric Hospital, Aro, Abeokuta, Ogun State, and the Neuropsychiatric Hospital, Aro, Lantoro Annex, Abeokuta, Ogun State, for their invaluable cooperation and support during data collection.

Sources of Funding: This research received no external funding.

Competing interests: The authors declare that they have no competing interests.

Dual Publication: None of the results/data/figures in our submission have been previously published

Authors' contributions

OOB conceived the study, HOA designed and supervised the study, OOB supervised data collection, HOA & OOB analysed and interpreted the data, OOB drafted the first manuscript, HOA reviewed the drafted manuscripts and wrote the final manuscript. All authors critically reviewed the manuscript, approved the final version, and agree to be accountable for all aspects of the work.

References

1. Oji AL, Orukwou U, Chinecherem OB, Ali EN, Atagwung SU, Kelechi AM, Helen W. Determinants of Mental Health Service Utilization among Patients in Model Primary Health Centre, Ozuoba, Obio/Akpor Local Government Area, Rivers State. *Int J Global Health Epidemiol.* 2025;2(1):1–5. <https://doi.org/10.54117/n5wgm529>.
2. Patel NM, Savaliya GV, Mehta PJ, Kataria LR. Global Disparities in Mental Health Systems: A Comparative Cross-sectional Study of Ten Countries with Different Income Levels. *Indian J Psychol Med* 2025 Oct 15:02537176251379999. <https://doi.org/10.1177/02537176251379999>

3. Andersen RM. National health surveys and the behavioral model of health services use. *Med Care*. 2008;46(7):647–53. [10.1097/MLR.0b013e31817a835d](https://doi.org/10.1097/MLR.0b013e31817a835d).
4. Ajzen I. The theory of planned behavior. *Organ Behav Hum Decis Process*. 1991;50(2):179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T).
5. Al-Krenawi A. The impact of cultural beliefs on mental health diagnosis and treatment. In *Culture, diversity and mental health-enhancing clinical practice* 2019 Oct 23 (pp. 149–65). Cham: Springer International Publishing. https://link.springer.com/chapter/10.1007/978-3-030-26437-6_9
6. Patel V, Saxena S, Lund C, Thornicroft G, Baingana F, Bolton P, Unützer J. The Lancet Commission on global mental health and sustainable development. *Lancet*. 2018;392(10157):1553–98. [https://doi.org/10.1016/S0140-6736\(18\)31612-X](https://doi.org/10.1016/S0140-6736(18)31612-X).
7. Paula CS, Lauridsen-Ribeiro E, Wissow L, Bordin IA, Evans-Lacko S. How to improve the mental health care of children and adolescents in Brazil: actions needed in the public sector. *Brazilian J Psychiatry*. 2012;34:334–51. <https://doi.org/10.1016/j.rbp.2012.04.001>.
8. Gulliford M, Figueroa-Munoz J, Morgan M, Hughes D, Gibson B, Beech R, Hudson M. What does 'access to health care' mean? *J Epidemiol Community Health*. 2002;56(9):647–51. <https://doi.org/10.1258/135581902760082>.
9. Shidhaye R, Kermode M. Stigma and discrimination as a barrier to mental health service utilization in India. *Int health*. 2013;5(1):6–8. <https://doi.org/10.1093/inthealth/ihs011>.
10. Corrigan P. How stigma interferes with mental health care. *Am Psychol*. 2004;59(7):614.
11. Henderson C, Noblett J, Parke H, Clement S, Caffrey A, Gale-Grant O, Schulze B, Druss B, Thornicroft G. Mental health-related stigma in health care and mental health-care settings. *Lancet Psychiatry*. 2014;1(6):467–82. [10.1016/S2215-0366\(14\)00023-6](https://doi.org/10.1016/S2215-0366(14)00023-6).
12. Clement S, Schauman O, Graham T, Maggioni F, Evans-Lacko S, Bezborodovs N, Thornicroft G. What is the impact of mental health-related stigma on help-seeking? A systematic review of quantitative and qualitative studies. *Psychol Bull*. 2015;141(1):27–49. <https://doi.org/10.1017/S0033291714000129>.
13. Haugen PT, McCrillis AM, Smid GE, Nijdam MJ. Mental health stigma and barriers to mental health care for first responders: A systematic review and meta-analysis. *J Psychiatr Res*. 2017;94:218–29. <https://doi.org/10.1016/j.jpsychires.2017.08.001>.
14. Bignall WJ, Jacquez F, Vaughn LM. Attributions of mental illness: An ethnically diverse community perspective. *Commun Ment Health J*. 2015;51(5):540–5. <https://doi.org/10.1007/s10597-014-9820-x>.
15. Subu MA, Holmes D, Arumugam A, Al-Yateem N, Maria Dias J, Rahman SA, Waluyo I, Ahmed FR, Abraham MS. Traditional, religious, and cultural perspectives on mental illness: A qualitative study on causal beliefs and treatment use. *Int J qualitative Stud health well-being*. 2022;17(1):2123090. <https://doi.org/10.1080/17482631.2022.2123090>.
16. Gureje O, Oladeji BD, Montgomery AA, Araya R, Kola L. Integrating mental health into primary care in Nigeria: Report of a demonstration project using the mental health gap action programme intervention guide. *Br J Psychiatry*. 2015;207(S56):s6–11. <https://doi.org/10.1186/s12913-015-0911-3>.
17. Rangel ML, Stelzig D, Martinez Enriquez C, Badr H. Multi-Stakeholder Perspectives on Barriers to Mental Health Support for Informal Caregivers. *Int J Environ Res Public Health*. 2026;23(3):325.
18. Abubakar A, Magaji BA, Bakare AT, Yakubu AI, Umar M, Illo NM, Yusuf SM. Barriers to mental health service utilization among patients attending tertiary health institution in Sokoto State, Nigeria. *J Nigerian Acad Med*. 2024;3(1):19–23. https://doi.org/10.4103/jnam.jnam_2_24.

19. Saxena S, Thornicroft G, Knapp M, Whiteford H. Resources for mental health: Scarcity, inequity, and inefficiency. *Lancet*. 2007;370(9590):878–89. [https://doi.org/10.1016/S0140-6736\(07\)61240-2](https://doi.org/10.1016/S0140-6736(07)61240-2).
20. Choudhry FR, Khan N, Munawar K. Barriers and facilitators to mental health care: A systematic review in Pakistan. *Int J Mental Health*. 2023;52(2):124–62. <https://doi.org/10.1080/00207411.2021.1941563>.
21. Cubillos L, Bartels SM, Torrey WC, Naslund J, Uribe-Restrepo JM, Gaviola C, Díaz SC, John DT, Williams MJ, Cepeda M, Gómez-Restrepo C. The effectiveness and cost-effectiveness of integrating mental health services in primary care in low-and middle-income countries: systematic review. *BJPsych Bull*. 2021;45(1):40–52. <https://doi.org/10.1192/bjb.2020.35>.
22. Muhorakeye O, Biracyaza E. Exploring barriers to mental health services utilization at Kabutare district hospital of Rwanda: Perspectives from patients. *Front Psychol*. 2021;12:638377. <https://doi.org/10.3389/fpsyg.2021.638377>.
23. Nwokedi VU, Koranteng U, Onwudiwe AO, Awofolajin YO, Ozoh OR, Omoike AO. Assessment of barriers to mental health services in underprivileged African communities: A scoping review. *J CONTEMP Stud Epidemiol Public Health*. 2026; 7 (1): ep26005 [Internet]. *Journal of Contemporary Studies in Epidemiology and Public Health*; 2026. <https://doi.org/10.29333/jconsep/17857>
24. Likeing M. Barriers and Facilitators of Help-Seeking for Mental Illness Among Rural Nigerian Communities: Psychiatric Social Work Perspective. *Fulafia Int J Social Work Pract*. 2026;1(1):12–46. <https://fijswp.org/index.php/FIJSWP/article/view/5>.
25. McGinty EE, Eisenberg MD. Mental health treatment gap—the implementation problem as a research problem. *JAMA psychiatry*. 2022;79(8):746–7. 10.1001/jamapsychiatry.2022.1468.
26. Hoseini-Esfidarjani SS, Negarandeh R, Delavar F, Janani L. Psychometric evaluation of the perceived access to health care questionnaire. *BMC Health Serv Res*. 2021;21(1):638. <https://doi.org/10.1186/s12913-021-06655-2>.
27. Kleinman A. Patients and healers in the context of culture: An exploration of the borderland between anthropology, medicine, and psychiatry. University of California Press; 1980. <https://doi.org/10.1525/9780520340848>.
28. Berhe KT, Gesesew HA, Ward PR. Traditional healing practices, factors influencing to access the practices and its complementary effect on mental health in sub-Saharan Africa: a systematic review. *BMJ open*. 2024;14(9):e083004. <https://doi.org/10.1136/bmjopen-2023-083004>.
29. Jidong DE, Bailey D, Sodi T, Gibson L, Sawadogo N, Ikhile D, Musoke D, Madhombiro M, Mbah M. Nigerian cultural beliefs about mental health conditions and traditional healing: a qualitative study. *J Mental Health Train Educ Pract*. 2021;16(4):285–99. <https://doi.org/10.1108/JMHTEP-08-2020-0057>.
30. Bila NJ, Carbonatto CL. Culture and help-seeking behaviour in the rural communities of Limpopo, South Africa: Unearthing beliefs of mental health care users and caregivers. *Mental Health Relig Cult*. 2022;25(6):543–62. <https://doi.org/10.1080/13674676.2022.2097210>.
31. Ngubane NP, De Gama BZ. The influence of culture on the cause, diagnosis and treatment of serious mental illness (Ufufunyana): Perspectives of traditional health practitioners in the Harry Gwala District, KwaZulu-Natal. *Culture, medicine, and psychiatry*. 2024;48(3):634 – 54. <https://doi.org/10.1007/s11013-024-09863-7>
32. Abhijita B, Balasubramanian I, Padhy SK, Mishra S. Culture and Somatization: A Cross-Sectional Survey of Somatic Symptom Disorder and Pathways to Care in Eastern India. *Int J Soc Psychiatry*. 2026;72(3):594–601. <https://doi.org/10.1177/00207640251374137>.
33. Fekih-Romdhane F, Jahrami H, Stambouli M, Alhuwailah A, Helmy M, Shuwiekh HA, Lemine CM, Radwan E, Saquib J, Saquib N, Fawaz M. Cross-cultural comparison of mental illness stigma and help-seeking attitudes: a

multinational population-based study from 16 Arab countries and 10,036 individuals. *Soc Psychiatry Psychiatr Epidemiol.* 2023;58(4):641–56. <https://doi.org/10.1007/s00127-022-02403-x>.

34. Singh S, Melendez K, Sezginis N. Examining the effect of discrimination and stigma on utilization of mental health services among college students. *J Am Coll Health.* 2023;71(8):2398–405. <https://doi.org/10.1080/07448481.2021.1970561>.
35. Chukwuma OV, Ezeani EI, Fatoye EO, Benjamin J, Okobi OE, Nwume CG, Egberuare EN. A systematic review of the effect of stigmatization on psychiatric illness outcomes. *Cureus.* 2024;16(6):e62642. Article 10.7759/cureus.62642.
36. World Health Organization. (2021). Guidance on community mental health services: Promoting person-centred and rights-based approaches. World Health Organization. <https://www.who.int/publications/i/item/9789240025707>

Tables

Table 1
Sociodemographic Characteristics of Respondents (N = 271)

Variable / Category	Frequency (n)	Percentage (%)
Age Group		
18–30 years	112	41.33
31–50 years	106	39.11
51–70 years	48	17.71
70 + years	5	1.85
Sex		
Female	143	52.77
Male	128	47.23
Marital Status		
Married	123	45.39
Single	116	42.80
Widowed	22	8.12
Divorced/Separated	10	3.69
Educational Level		
Tertiary	137	50.55
Secondary	89	32.84
Primary	34	12.55
No formal education	11	4.06
Employment Status		
Self-employed	120	44.28
Employed	64	23.62
Unemployed	44	16.24
Retired	22	8.12
Student	21	7.75
Monthly Income (₦)		
< 50,000	84	31.00
50,000–100,000	85	31.37
100,000–300,000	74	27.31
300,000–500,000	21	7.75

Variable / Category	Frequency (n)	Percentage (%)
500,000 and above	7	2.58
Place of Residence		
Urban	224	82.66
Rural	47	17.34
Religion		
Christianity	198	73.06
Islam	70	25.83
Traditional	3	1.11

Table 2
Knowledge, Attitudes, and Perceptions Toward Mental Health (Collapsed
Responses) (N = 271)

Variable / Category	Frequency (n)	Percentage (%)
Knowledge and Awareness of Mental Health (N = 271)		
Knowledge of where to access services		
Disagree	33	12.18
Neutral	15	5.54
Agree	223	82.29
Knowledge of mental health disorders		
Disagree	50	18.45
Neutral	64	23.62
Agree	157	57.93
Attitudes and Beliefs Toward Mental Health (N = 271)		
Permanent institutionalization belief		
Disagree	172	63.47
Neutral	25	9.23
Agree	74	27.31
Supernatural causation belief		
Disagree	172	63.47
Neutral	25	9.23
Agree	74	27.31
Mental illness affects anyone		
Disagree	23	8.49
Neutral	18	6.64
Agree	230	84.87
Institutional and System Barriers (N = 271)		
Affordability of services		
Disagree	149	54.98
Neutral	31	11.44
Agree	91	33.58
Waiting time reasonableness		
Disagree	115	42.44

Variable / Category	Frequency (n)	Percentage (%)
Neutral	51	18.82
Agree	105	38.75
Staff attitude		
Disagree	24	8.86
Neutral	19	7.01
Agree	228	84.13
Hospital environment		
Disagree	62	22.88
Neutral	47	17.34
Agree	162	59.78
Cultural Influences and Stigma (N = 271)		
Family shame		
Disagree	81	29.89
Neutral	55	20.30
Agree	135	49.81
Community judgement		
Disagree	53	19.56
Neutral	58	21.40
Agree	160	59.04
Avoid discussing mental health		
Disagree	35	12.92
Neutral	45	16.61
Agree	191	70.48
Social Support (N = 271)		
Family support		
Disagree	95	35.06
Neutral	31	11.44
Agree	145	53.51
Peer encouragement		
Disagree	80	29.52
Neutral	36	13.28

Variable / Category	Frequency (n)	Percentage (%)
Agree	155	57.20
Confidence in seeking care		
Disagree	63	23.25
Neutral	31	11.44
Agree	177	65.32
Perceived Behavioral Control (N = 271)		
Intention to seek care		
Disagree	26	9.59
Neutral	22	8.12
Agree	223	82.29
Ease of access		
Disagree	73	26.94
Neutral	37	13.65
Agree	161	59.41

Table 3

Summary of Significant and Non-Significant Bivariate Associations with Mental Health Service Utilization (N = 271)

Domain	Independent Variable	Outcome Variable	χ^2	df	p-value	Significance	Direction of Association
Sociodemographic	Place of Residence	Access Barriers (Waiting Time/Distance)	9.58	4	0.048	Significant	Rural residence associated with higher reported barriers
Sociodemographic	Educational Level	Community Perception	13.3	12	0.348	Not Significant	No association
Sociodemographic	Educational Level	Family-Related Stigma	11.08	12	0.522	Not Significant	No association
Sociodemographic	Educational Level	Openness to Discuss MH	10.17	12	0.601	Not Significant	No association
Institutional	Affordability	Service Utilisation Level	1.05	2	0.591	Not Significant	No association
Institutional	Waiting Time	Service Utilisation Level	2.38	2	0.305	Not Significant	No association
Institutional	Healthcare Worker Attitude	Service Utilisation Level	4.21	2	0.122	Not Significant	No association
Institutional	Hospital Environment	Service Utilisation Level	0.44	2	0.801	Not Significant	No association
Sociocultural	Family-Related Stigma	Service Utilisation Level	4.86	8	0.772	Not Significant	No association
Sociocultural	Community Judgement	Service Utilisation Level	20.03	8	0.010	Significant	Higher utilisation despite perceived negative judgement
Sociocultural	Silence Due to Stigma	Service Utilisation Level	10.21	8	0.251	Not Significant	No association
Sociocultural	Supernatural Beliefs	Service Utilisation Level	16.9	8	0.031	Significant	Belief associated with lower utilisation
Sociocultural	Family Support	Service Utilisation Level	8.66	8	0.372	Not Significant	No association
Sociocultural	Peer Encouragement	Service Utilisation	13.07	8	0.109	Not Significant	No association

Domain	Independent Variable	Outcome Variable	χ^2	df	p-value	Significance	Direction of Association
Level							

Table 4

Multivariable Logistic Regression Analysis of Factors Associated with Mental Health Service Utilization (N = 271)

Variable (Predictor)	Category/Factor	Odds Ratio (AOR)	95% CI (Lower – Upper)	Coefficient (β)	Std. Error (SE)	Z-Statistic	p-value
Socioeconomic Factor	Monthly Income	1.1402	0.6755–1.9245	0.1312	0.2671	0.4913	0.6232
Geographic Factor	Residence (Urban vs Rural)	1.3803	0.7172–2.6563	0.3223	0.3340	0.9649	0.3346
Cultural & Social Influence	Stigma	1.5971	0.9112–2.7992	0.4682	0.2863	1.6352	0.1020
Knowledge Factor	Mental Health Knowledge	1.2559	0.7526–2.0958	0.2279	0.2613	0.8722	0.3831
Attitudinal Factor	Supernatural Beliefs	0.3861	0.1733–0.8603	-0.9516	0.4087	-2.3282	0.0199*
Institutional Barriers	Affordability	1.6353	0.8078–3.3105	0.4919	0.3598	1.3669	0.1717
	Waiting Time	1.0003	0.5685–1.7600	0.0003	0.2883	0.0009	0.9992
	Staff Attitude	0.9432	0.4849–1.8349	-0.0584	0.3395	-0.1721	0.8634
	Hospital Environment	0.8547	0.5006–1.4591	-0.1570	0.2729	-0.5754	0.5650
Perceived Behavioral Factor	Accessibility (Ease of Access)	1.0038	0.6026–1.6723	0.0038	0.2604	0.0147	0.9883
Constant	—	—	—	-0.3606	0.5507	-0.6547	0.5127
Model Summary- Model Convergence: Achieved, Number of Iterations: 3, Final – 2 Log Likelihood: 363.6143							
Cases Included in Analysis: 271. Note: AOR = Adjusted Odds Ratio, CI = Confidence Interval and Statistical significance set at $p < 0.05$							

Table 5
Thematic Analysis- Major Barriers to mental health service utilization

Barrier Theme	Number of Respondents	% of Respondents	Relative Distribution
Financial Barriers	156	57.6%	29.6%
Distance/Geography	98	36.2%	18.6%
Waiting Time/Overcrowding	87	32.1%	16.5%
Stigma/Discrimination	73	26.9%	13.8%
Lack of Family/Social Support	61	22.5%	11.6%
Institutional Barriers	52	19.2%	9.9%

Figures



Figure 1

Graphical Abstract of the Determinants of Mental Health Service Utilization Among Psychiatric patients in Southwest Nigeria

Footnote: Graphical abstract summarizing the study design, key findings, and public health implications of determinants of mental health service utilization among psychiatric outpatients attending tertiary neuropsychiatric institutions in Southwest Nigeria.

Abbreviations: AOR, Adjusted Odds Ratio; CI, Confidence Interval; χ^2 , Chi-square statistic. Statistical significance was set at $p < 0.05$.