

Barriers and Enhancers to the Implementation of Music Therapy in the Management of Mental Illness in Neuropsychiatric Hospitals in Nigeria

Sunday Oluwafemi Omoniyi

sunday.omoniyi@fuhsu.edu.ng

Federal University of Health Sciences, Ila-Orangun

Emmanuel Ejembi Anyebe

University of Ilorin

Danjuma Aliyu

College of Nursing Sciences, Ahmadu Bello University Teaching Hospital-Zaria

Adetunmise Oluseyi Olajide

Ladoke Akintola University of Technology Ogbomosho

Samuel Damilare Agbaje

School Complex University of Ilorin Teaching Hospital, Ilorin

Daniel Durodoluwa Faleti

Sussex Partnership NHS Foundation Trust Swandean, Arundel Road, Worthing, West Sussex

Oluwaseyi Abiodun Akpor

Saint John Regional Hospital, Saint John, New Brunswick

Amina Wuraola Abdussalam

College of Nursing Sciences, University of Ilorin Teaching Hospital, School Complex, Ilorin

Research Article

Keywords: Barriers, Implementation, Enhancers, Music Therapy, Management, Mental Illness

Posted Date: May 22nd, 2026

DOI: <https://doi.org/10.21203/rs.3.rs-9388878/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

Music therapy is the clinical and evidence-based use of music interventions to accomplish individualized therapeutic goals. This study was conducted to assess the barriers and enhancers influencing the implementation of music therapy in the management of mental illness across selected neuropsychiatric hospitals in Nigeria. Guided by a descriptive cross-sectional design, data were collected using self-structured questionnaires administered to mental health professionals, and analysed using the SPSS version 25. Findings revealed that nurses generally demonstrated confidence in using music therapy (Mean = 3.07). However, major barriers to implementation included lack of formal training in music therapy, inadequate equipment and facilities such as absence of audio devices, DVD players, and dedicated music rooms, as well as limited institutional policy support. Time constraints and lack of evidence were not perceived as major barriers (means of 2.89 and 2.83 respectively). Significant differences were observed also across hospitals regarding confidence levels, availability of resources, patient interest, time constraints, and supervisory support, with Hospital A consistently reporting more favorable conditions than Hospitals B and C ($p < 0.05$). The study concluded that time availability and confidence in using music therapy serve as enhancers, whereas inadequate training and limited availability of essential resources are perceived as barriers to its use. It is recommended that addressing training and resource gaps is essential to ensure its sustainable and equitable integration into mental health care services in Nigeria.

BACKGROUND

Music therapy has gained global recognition as an evidence-based complementary intervention for improving emotional, cognitive, and behavioural outcomes among individuals with mental illness [1]. Defined as the clinical and evidence-informed use of music interventions to accomplish individualized goals within a therapeutic relationship in order to achieve physical, emotional, mental, social and cognitive needs [2, 3]. In neuropsychiatric settings, music therapy is particularly useful as a non-pharmacological strategy that complements conventional treatment, reduces distress, and enhances patient engagement [4]. Despite these benefits, its application in low- and middle-income countries, including Nigeria, remains limited.

In Nigeria, the mental health care system continues to face numerous challenges such as inadequate funding, shortage of specialists, heavy workloads, and limited availability of therapeutic resources [5, 6]. These systemic constraints often impede the adoption of innovative or complementary therapies. Implementing music therapy in neuropsychiatric hospitals therefore depends on a range of factors, including the knowledge and attitudes of mental health professionals, availability of training and resources, institutional policies, leadership support, and perceived patient interest [7]. Additionally, studies have shown that budget constraints, limited knowledge, inadequate resources or tools, shortage of expert personnel, and insufficient time, space, or interest are key factors that hinder healthcare professionals from integrating music therapy into patient treatment [8]. Conversely, the lack of national

guidelines or institutional protocols hinders standardization and limits the effective integration of music therapy into mental health services [9].

Therefore, [10] emphasized that insufficient knowledge and skills in music therapy, lack of formal training, and limited time for music-based interventions, inadequate facility resources, and low practitioner confidence are major factors that hinder the use of music therapy for individuals with mental illness. Similarly, [11] noted that the limited availability of robust evidence continues to be a major barrier to the wider development and adoption of music as a therapeutic intervention.

Moreover, cultural perceptions of music, organizational readiness, and evidence-based awareness play significant roles in determining whether music therapy is adopted in clinical practice [12]. Understanding the factors that influence the implementation of music therapy is therefore pivotal for improving mental health outcomes and promoting holistic patient care in neuropsychiatric hospitals. Against this background, the present study investigates the factors affecting the implementation of music therapy in the management of mental illness in neuropsychiatric hospitals in Nigeria. Identifying these factors will not only enhance the integration of complementary therapies into psychiatric practice but also contribute to strengthening mental health service delivery across the country.

METHOD

Research Design and Setting

The research design was a quantitative, cross-sectional descriptive survey method. The study collected precise information on use of music therapy in the treatment of mental illness at the selected Neuropsychiatric Hospitals, in Northwest, Southeast and Southwest States of Nigeria.

The three Federal Mental Health institutions selected for the study were Federal Neuropsychiatric Hospital Aro Abeokuta, Federal Neuropsychiatric Hospital New heaven Enugu and Federal Neuropsychiatric Hospital Barnawa Kaduna State.

The present Federal Neuropsychiatric hospital Aro (FNPHA) started in 1944 as an asylum for the mentally ill soldiers returning to Nigeria at the end of Second World War. It was established by the British colonialists under the leadership of Mr. Leonard the present site of the hospital was established in 1954 at the instance of Prof. Adeoye Lambo and was formally named Aro Mental Hospital and it located within Abeokuta North Local Government in Ogun State between Imeko Afon and Abeokuta South Local Government. The major ethnic group is Yoruba and other Nigerian ethnic groups. It has about 526 bed capacity. The Hospital is one of the foremost specialist mental health institution in Nigeria, which comprises sixteen (16) acute wards, four (4) units and one National Health Insurance and Community Clinic. For the purpose of nursing management, the wards were categorized into male and female wards. Each ward consist of fourteen nurses working over two different shifts per day. Bed occupancy is twenty eight per ward amounting to the nurse-patient ratio usually 1:10 per shift, sometimes with the ward manager who also doubles as administrative head of the ward or units. Other supportive health workers

usually on duty with nurses are health attendants, porters and cleaners, sometimes psychiatrist, social workers and clinical psychologist who comes visiting the patients; though they are not part of this study. The total mental health nurses population in NPHI, Aro are one hundred and thirty two (132)

The present Federal Neuropsychiatric Hospital Enugu (FNPHE) is one out of the four (4) Federal tertiary health institution that was established in 1975. The hospital is located along Chime Avenue New Heaven in Enugu North Local Government area. FNPHE is the only neuropsychiatric health facility in the south-eastern geopolitical region and its clientele are drawn from this region and beyond. The major ethnic group is Igbo and other Nigerian ethnic groups. FNPHE is one of the federal health institutions in the locality, the hospital is known for treating patients with mental illness and neurological conditions. The hospital is 118 bedded facility and is made up of various departments with various specialists in various fields of mental healthcare services.

The Federal Neuro-Psychiatric Hospital, Barnawa, (FNPHB) was initially started as Psychiatric Hospital Kakuri in 1975, and became Federal Neuro-Psychiatric Hospital in 1996, and became one of the 8 Neuro-Psychiatric Hospitals in Nigeria. The hospital is located at opposite Shagari Low Cost, Barnawa Kaduna State. FNPHB is one of the four Federal tertiary health institution and the only Neuropsychiatric Hospital in the geopolitical zone. The major ethnic group is Hausa and other Nigerian ethnic groups. The hospital is a 200 bed hospital which comprises of two male and female wards, one toxicology ward, one child and adolescence ward, one emergency units and one National Health Insurance and rehabilitation Centre, and is made up of various departments with various specialists in various fields of mental health and behavioral sciences.

Study Population

All mental health and psychiatric nurses in the three facilities were constituted the population for the study. A total of 366 nurses make up the population. All nurses employed and are on the pay roll of the selected neuropsychiatric hospital, with willingness to participate were included except intern nurses on the compulsory one year post graduation clinical experience, as well as nurses who were unavailable at the time of the data collection, and nurses who refuse to give consent. In addition, nurses who had not been trained as Mental Health and Psychiatric Nurse were excluded

Sample Size Determination

The sample size of the study was drawn from the total population (366) of Mental and Psychiatric Nurses in the three selected Neuro Psychiatric Hospitals. The calculated minimum sample size for this study was 111 Mental and Psychiatric Nurses, based on Mugenda and Mugenda formula [13], which recommends that, when study population is less than 10, 000, a sample size of between 10 to 30% is a good representation of the target population and hence 30% is adequate for analysis. Hence the calculated sampling size was 111 mental health and psychiatric nurses from the three selected

Neuropsychiatric facilities in the selected geo-political zones. A 10% attrition of 12 was added. Thus, a minimum sample size, N, of 123 was selected for this study.

Sampling Technique

A purposive sampling technique was employed for this study. This technique was considered appropriate because the study focused specifically on nurses working in neuropsychiatric hospitals, who are directly involved in the management of patients with mental illness and are key stakeholders in the implementation of therapeutic interventions such as music therapy. Eligible participants were registered mental health and psychiatric nurses who were actively involved in patient care within the selected neuropsychiatric hospitals during the period of data collection. Nurses were selected based on their professional ranks, clinical experience, and willingness to participate, ensuring that respondents possessed adequate knowledge and practical insight into the barriers and enhancers influencing the use of music therapy in clinical practice as shown in the table one below.

Table 1
showing the Proportion of sample Calculation

S/N	Centre	Cadre	Number of Nurses	Calculated number in cadre	Sample size
1	Federal Neuropsychiatric Hospital Aro	Nursing officer II	25	25(25x0.3 = 7.5)	8
2		Nursing I	21	21 (21 x 0.3 = 6.3)	6
3		Senior Nursing Officer	18	18(18x0.3 = 5.4)	5
4		Principal Nursing Officer	20	20(20x0.3 = 6)	6
5		Assistant Chief Nursing Officer	17	17(17x0.3 = 4.8)	5
6		Chief Nursing Officer	15	15(15x0.3 = 4.5)	5
7		Assistant Director of Nursing	4	4(4x0.3 = 1.2)	1
8		Deputy Director of Nursing	10	10(10x0.3 = 3)	3
		Total			39
9	Federal Neuropsychiatric Hospital, Barnawa	Nursing officer II	25	25(25x0.3 = 7.5)	8
10		Nursing I	20	20(20x0.3 = 6)	6
11		Senior Nursing Officer	27	27(27x0.3 = 8.1)	8
12		Principal Nursing Officer	19	19(19x0.3 = 5.7)	6
13		Assistant Chief Nursing Officer	15	15(15x0.3 = 4.5)	5
14		Chief Nursing Officer	21	21(21x0.3 = 6.3)	6
15		Assistant Director of Nursing	5	5(5x0.3 = 1.5)	2
		TOTAL	135		40
16	Federal Neuropsychiatric Hospital, Enugu	Nursing officer II	14	16(16x0.3 = 4.2)	4

S/N	Centre	Cadre	Number of Nurses	Calculated number in cadre	Sample size
17		Nursing I	20	20(20x0.3 = 6)	6
18		Senior Nursing Officer	17	17(17x0.3 = 5.1)	5
19		Principal Nursing Officer	15	15(15x0.3 = 4.5)	5
20		Assistant Chief Nursing Officer	10	10(10x0.3 = 3)	3
21		Chief Nursing Officer	9	9(9x0.3=.726)	3
22		Assistant Director of Nursing	15	15(15x0.3 = 4.5)	5
TOTAL					31

Instrument for Data Collection

An 18-item self-administered structured questionnaire about factors affecting the Implementation of Music Therapy in the Management of Mental Illness was administered to the selected subjects in the Hospitals. This contains two sections, that is:

Section 'A' presented the socio-demographic profile of the respondents (the age, gender, marital, professional rank, highest educational level, professional qualification, area of specialization, religion and years of working experience.)

Section 'B' was focused on information on factors influencing the use of music therapy in the treatment of mental illness. The section comprised ten items with four point likert scale Comprising of Strongly Agreed (SA), Agreed (A), Strongly Disagreed (SD) and Disagreed (D). SA represents the highest score of 1–4. SA, score of 1, A score of 2, SA score of 3 and D score of 4. The questionnaire was pre-tested on 12 mental health nurses (10% of sample size) at the Mental Health Unit, Federal Teaching Hospital, Ido-Ekiti, Ekiti State. After their responses, the instruments were collated scored and analysed using SPSS version 25. The reliability coefficient generated for the pilot study generally was 0.76, using Cronbach Alpha test. The above coefficients was high enough to guarantee the reliability of the instrument.

Method of Data Collection

Eligible participants were the 123 mental health nurses that met the inclusion criteria; the researcher firstly sought the consent and cooperation of the authorities of the selected hospitals. After which the respondents were asked to give informed consent and were allowed to participate in the study, only after

appending their signatures to the consent forms as a sign of voluntary participation. The total number of mental health nurses in Aro were 39, Barnawa 40 while Enugu was 31, and 12 attrition rate = 123. The instruments were administered with the assistance of two trained research assistants in each hospital to make the exercise successful this was done in three phases, rotating the selected hospitals; Aro, Barnawa and Enugu within four weeks interval. The respondents were given full explanation on how to fill the questionnaire by the researcher. Also the respondents were instructed to complete the questionnaire independently and collected back from them on the spot.

Method of Data Analysis

Data cleaning and editing were done daily by the researcher to detect and correct errors in data collection. A coding guide was designed to facilitate data entry. Data entry and analysis were done using the Statistical Package for Social Sciences (SPSS) 25 software. Descriptive data analysis was conducted on, socio-demographic variables, Nurse's level of knowledge, willingness and utilization of music-therapy in the treatment of mental illness and frequency distribution was presented in tables. Inferential statistical analysis: Chi-square tests was used in testing hypotheses at 0.05 level of significance.

Ethical Consideration

Ethical approval

for the study was obtained from the Health Research Ethical Committees of the three participating hospitals. Approvals were granted by the Neuropsychiatric Hospital, Aro (Ref: NPHA/276/VOL.VI/067) and the Federal Neuropsychiatric Hospital, Enugu (Ref: FNHE/REC/VOL.11/075). The third facility granted permission based on these prior approvals. Additionally, formal authorization was obtained from the Heads of Department of each selected hospital. Informed consent was obtained from all participants after they received a comprehensive explanation of the study's objectives, procedures, and their rights, including the voluntary nature of participation and assurances of confidentiality.

RESULTS

Socio-demographic characteristics of respondents

Table.2 below, showed that majority 36 (29.3%) of the participant were within the age group of 30–39 years, 30 (24.4%) were 50–59 years while 28 (22.8%) were 20–29. Greater number 88 (71.5%) of the respondents were females and 35 (28.5%) males. Almost half 41 (33.3%) of the respondents were Igbo, 40 (32.5%) Yoruba while 30 (24.4%) Hausa. Those who practice Christianity were 86 (69.9%) and Islam were 36 (29.3%). More than half 77 (62.6%) of the respondents were married while 43 (35.0%) were single. In addition almost all, 106 (86.2%) of them have BScN/BNSc and only 17 (13.8%) possessed MSc (Nursing). All respondents had a professional Qualification of RN with RMHPN/RPN with 123 (100.0%).

On specialization, majority 45 (47.68%) of the participants specialized in Adult/acute care psychiatric nursing and 44 (35.8%) Drug and addiction care nursing.

Table 2
Showing distribution of respondents by socio-demographic
characteristics (N = 123)

Variables	Frequency	Percentage (%)
Age (in years)		
20–29	28	22.8
30–39	36	29.3
40–49	30	24.4
50–59	24	19.5
60 and above	5	4.1
Gender		
Male	35	28.5
Female	88	71.5
Ethnic groups		
Yoruba	40	32.5
Igbo	41	33.3
Hausa	30	24.4
Kanuris	4	3.3
Ebira	8	6.5
Religion		
Christianity	86	69.9
Islam	36	29.3
Choose not to say	1	0.8
Marital status		
Single	43	35.0
Married	77	62.6
Divorce	1	0.8
Widow	2	1.6
Education		
BScN/BNSc	106	86.2

Variables	Frequency	Percentage (%)
Age (in years)		
M.Sc (Nursing)	17	13.8
Professional Qualification		
RN only	-	
RN with RMHPN/RPN	123	100.0
Area of Specialization		
Community mental health nursing	7	5.7
Forensic nursing	11	8.9
Geriatric nursing	3	2.4
Drug and addiction care nursing	44	35.8
Child and adolescent nursing	14	11.4
Adult/acute care psychiatric nursing	44	35.8

Factors influencing the use of music therapy in the management of mental illness

Table 3 highlights a combination of barriers and enhancers influencing the use of music therapy as perceived by participants. Respondents generally did not lack confidence in using music therapy (mean = 3.07), and most did not believe that time constraints limited its use (mean = 2.89). Similarly, respondents disagreed that there is no evidence supporting music therapy (mean = 2.67), indicating these factors act as enhancers rather than barriers. In contrast, several structural and capacity-related barriers were identified. Lack of formal training in music therapy emerged as a key barrier (mean = 2.46). Inadequate equipment and facilities were also prominent barriers, including absence of audiotapes or radios (mean = 2.37), DVD players (mean = 2.17), and dedicated music rooms (mean = 2.17). In addition, respondents reported limited institutional policy support for music therapy (mean = 2.85), which further constrains implementation.

Table 3
Factors influencing the use of music therapy in the management of mental illness

Items	SA	A	D	SD	Mean STD	Lower	Upper	Remark
I have no confidence to use music therapy.	7 (5.7)	13 (10.6)	68 (55.3)	35 (28.5)	3.07± 0.87	2.92	3.21	Enhancer
I don't have time to provide music therapy.	1 (0.8)	38 (30.9)	57 (46.3)	27 (22.0)	2.89± 0.75	2.76	3.03	Enhancer
I don't have the training to use music therapy.	12 (9.8)	59 (48.0)	35 (28.5)	17 (13.8)	2.46± 0.94	2.31	2.62	Barrier
I don't have audiotapes and radio to transmit live sound in my facility.	28 (22.8)	39 (31.7)	38 (30.9)	18 (14.6)	2.37± 1.85	2.20	2.55	Barrier
I don't have DVD player in my facility.	32 (26.0)	53 (43.1)	27 (22.0)	11 (8.9)	2.17± 0.95	1.98	2.30	Barrier
I don't have music room in my facility.	33 (26.8)	50 (40.7)	26 (21.1)	14 (11.4)	2.17± 0.90	2.00	2.34	Barrier
I don't think patient will be interested in the therapy.	7 (5.7)	27 (22.0)	54 (43.9)	35 (28.5)	2.95± 0.86	2.80	2.10	Enhancer
My facility have policies to support the use of music therapy.	8 (6.5)	29 (23.6)	60 (48.8)	26 (21.1)	2.85± 0.83	2.70	2.99	Barrier
There is no evidence to support music therapy efficacy as treatment modality.	13 (10.6)	32 (26.0)	60 (48.8)	18 (14.6)	2.67± 0.85	2.52	2.83	Enhancer
My supervisor/charge nurse does not allow the use of music therapy on patients.	9 (7.3)	16 (13.0)	52 (42.3)	46 (37.4)	3.10± 0.91	2.94	3.26	Enhancer
Weighted Mean	2.67							

Comparison of selected factors influencing the use of music therapy across three hospitals

As presented in the Table 4, findings showed that hospital setting significantly influenced several factors related to music therapy use. Confidence levels, perceived lack of time patient interest, and supervisor support appeared as positive factors, while non-availability of audio tapes and policies to support the use of music therapy were negative factors, all varied across the facilities, with Hospital A consistently reporting more favorable conditions than Hospitals B and C ($p < 0.05$). In contrast, training, availability of DVDs and music rooms, facility policies, and perceived lack of evidence showed no significant differences across hospitals, indicating that these challenges are common to all settings.

Table 4
Comparison of selected challenges factors influencing the use of music therapy across three hospitals.

Factors	Settings				
	Hospital A NW	Hospital B SE	Hospital C SW	χ ²	P – value
No confidence	4(3.3%)	1(0.8%)	2(1.6%)	15.98	0.014*
Strongly Agree	5(4.1%)	2(1.6%)	6(4.9%)		
Agree	33(26.8%)	19(15.4%)	16(13%)		
Disagree	5(4.1%)	11(8.9%)	19(15.4%)		
Strongly Disagree					
Lack of time for music therapy					
Strongly Agree	1(0.8%)	0(0%)	0(0%)	14.14	0.028*
Agree	19(15.4%)	4(6.9%)	13(10.6%)		
Disagree	23(18.7%)	19(15.4%)	15(12.2%)		
Strongly Disagree	4(3.3%)	8(6.5%)	15(12.2%)		
Training to use music	1(0.8%)	0(0%)	0(0%)	6.38	0.605
No response	6(4.9%)	3(2.4%)	3(2.4%)		
Strongly Agree	22(17.9%)	17(13.8%)	20(16.3%)		
Agree	15(12.2%)	7(5.7%)	12(9.8%)		
Disagree	3(2.4%)	6(4.9%)	8(6.5%)		
Strongly Disagree					
Availability of audio tapes					
No response	0(0%)	0(0%)	1(0.8%)	16.27	0.039*
Strongly Agree	12(9.8%)	4(3.3%)	12(9.8%)		
Agree	18(14.6%)	9(7.3%)	12(9.8%)		
Disagree	13(10.6%)	17(13.8%)	8(6.5%)		
Strongly Disagree	4(3.3%)	3(2.4%)	10(8.1%)		

Availability of DVD	10(8.1%)	7(5.7%)	15(12.2%)	7.07	0.314
Strongly Agree	20(16.3%)	19(15.4%)	14(11.4%)		
Agree	11(8.9%)	6(4.8%)	10(8.1%)		
Disagree	6(4.8%)	1(0.8%)	4(3.3%)		
Strongly Disagree					
Availability of music room					
No response	0(0%)	1(0.8%)	1(0.8%)	9.0	0.342
Strongly Agree	11(8.9%)	9(7.3%)	13(10.6%)		
Agree	17(13.8%)	17(13.8%)	16(13%)		
Disagree	13(10.6%)	6(4.8%)	7(5.7%)		
Strongly Disagree	6(4.9%)	0(0%)	6(4.8%)		
Patients' interest	0(0%)	2(1.6%)	1(0.8%)	25.93	0.001*
No response	6(4.9%)	1(0.8%)	0(0%)		
Strongly Agree	13(10.6%)	4(3.3%)	8(6.3%)		
Agree	24(19.5%)	15(12.2%)	14(11.4%)		
Disagree	4(3.3%)	11(4.9%)	20(16.3%)		
Strongly Disagree					
Facility policies	1(0.8%)	2(1.6%)	1(0.8%)	13.38	0.100
No response	4(3.3%)	1(0.8%)	3(2.4%)		
Strongly Agree	18(14.6%)	5(4.1%)	6(4.9%)		
Agree	19(15.4%)	18(14.6%)	21(17.1%)		
Disagree	5(4.1%)	7(5.7%)	12(9.8%)		
Strongly Disagree					
No evidence to support	6(4.9%)	1(0.8%)	6(4.9%)	10.81	0.095
Strongly Agree	16(13%)	9(7.3%)	7(5.7%)		
Agree	23(18.7%)	16(13%)	21(17.1%)		
Disagree	2(1.4%)	7(5.7%)	9(7.3%)		
Strongly Disagree					
Supervisor or charge nurse					
No response	0(0%)	1(0.8%)	0(0%)	19.67	0.012*

Strongly Agree	5(4.1%)	0(0%)	4(3.3%)
Agree	9(7.3%)	5(4.1%)	2(1.4%)
Disagree	24(19.5%)	9(7.3%)	19(15.4%)
Strongly Disagree	9(7.3%)	18(14.6%)	18(14.6%)

Discussion

This study assessed the barriers and enhancers to the implementation of music therapy in neuropsychiatric hospitals in Nigeria, with findings largely consistent with existing literature. Music therapy has been widely acknowledged as an effective non-pharmacological intervention that complements conventional psychiatric treatment by reducing distress, improving engagement, and enhancing overall patient outcomes [1–4]. However, translating this evidence into routine clinical practice remains challenging, particularly in resource-constrained settings. The socio-demographic profile of respondents revealed a predominantly female, professionally qualified, and experienced mental health nursing workforce. The high level of educational attainment and specialized psychiatric training among respondents suggested that lack of professional competence is not a primary barrier to music therapy implementation. This supports earlier assertions that healthcare workers in mental health settings often possess foundational knowledge and positive attitudes toward complementary therapies but are constrained by external factors [7, 10].

Consistent with previous studies [8, 10], lack of formal training emerged as a major barrier to the use of music therapy. Although respondents expressed confidence in principle, the absence of structured training limits their ability to apply music therapy systematically and therapeutically. This finding reinforces the argument that insufficient knowledge and skills hinder effective utilization of music therapy in clinical settings [10]. Without formal education or certification, nurses may be reluctant to integrate music therapy into care plans despite recognizing its benefits.

Inadequate infrastructure and equipment, including lack of audio devices, DVD players, and dedicated music rooms, were also identified as significant barriers. This finding aligns with studies that report resource scarcity as a major limitation to implementing complementary therapies in low- and middle-income countries [5, 6, and 8]. The absence of appropriate facilities restricts the practical application of music therapy and limits its consistency and quality in patient care. Institutional policy support was another notable constraint. The lack of clear guidelines or protocols for music therapy mirrors earlier reports that the absence of national or institutional frameworks hinders standardization and integration of music therapy into mental health services [9]. Without policy backing, music therapy remains informal, inconsistent, and dependent on individual initiative rather than being embedded in routine care.

Interestingly, respondents largely disagreed that lack of evidence or patient disinterest was a barrier. This contrasts with earlier concerns that limited empirical evidence impedes adoption of music therapy [11], suggesting increased awareness of its effectiveness among mental health nurses. This positive

perception reflects growing global and local recognition of music therapy as a valid therapeutic modality [1, 12]. The significant variation observed across hospitals further underscores the role of organizational readiness and leadership support in determining implementation success. Differences in confidence, time availability, resource access, patient interest, and supervisory support suggest that institutional culture and management commitment strongly influence adoption, as highlighted in previous studies [7, 12].

The findings of this study confirmed that individual-level attitudes toward music therapy are generally positive that is enhancer to the implementation of music therapy, systemic, organizational, and infrastructural obstacles remain the primary barriers to its implementation. Addressing these barriers through targeted training programs, improved resource allocation, supportive policies, and leadership engagement is crucial for integrating music therapy into psychiatric care. Strengthening these areas will enhance holistic, patient-centered mental health services and align practice with global evidence-based standards.

Conclusion

This study highlights that the implementation of music therapy in the management of mental illness in neuropsychiatric hospitals in Nigeria is shaped by a complex interplay of barriers and enhancers. While mental health professionals generally demonstrated a positive attitude and high confidence toward the use of music therapy, its routine application remains limited by structural, institutional, and capacity-related challenges. Primal barriers identified include inadequate training and limited professional competence in music-based interventions, and insufficient availability of essential resources such as audio equipment and designated music spaces. Conversely, staff confidence, to use music as a therapy emerged as important enhancers that facilitate willingness to adopt music therapy in clinical practice. Variations observed across facilities further suggest that better-resourced hospitals with stronger organizational support are more likely to integrate music therapy effectively.

Recommendations

Based on the findings of the study, the following evidence-based recommendations are proposed to enhance the implementation of music therapy in the management of mental illness in neuropsychiatric hospitals in Nigeria:

1. There is need for structured and continuous professional training on music therapy should be integrated into in-service education and mental health nursing curricula. This will address gaps in competence, improve practical skills, and enhance confidence for effective application in clinical settings.
2. Hospital management and policymakers should address heavy workloads by recruiting additional mental health professionals and optimizing staff deployment. Reduced workload will create adequate time for therapeutic interventions such as music therapy.

3. Facilities should be equipped with essential music therapy resources, including audio devices, DVDs, musical instruments, and dedicated music rooms. Adequate funding should be allocated to support infrastructural development.
4. The Federal Ministry of Health and relevant regulatory bodies should develop and implement standardized, evidence-based guidelines for music therapy to ensure uniformity and integration across mental health facilities.
5. Institutions should support local research, pilot programs, and outcome evaluations on music therapy to strengthen the evidence base and inform policy decisions.
6. Best practices from better-resourced hospitals should be scaled and adapted across other facilities to reduce inter-institutional disparities and promote equitable implementation nationwide.

Declarations

Acknowledgements

The authors would like to express their gratitude to the management of the institutions for granting us the approval to conduct this study and all our participants

Author contributions

OSO conceived and coordinated the study, collected and analyzed the data, and drafted the manuscript. **AEE** and **OAA**, supervised, coordinated the study contributed to the study design, and analysed data **AD** and **ASD**, assisted in data analysis, and critically revised the manuscript. **AAW**, **OAQ** and **FDD**, contributed to manuscript review and offered additional insights. All authors read and approved the final manuscript.

Funding

This research was not funded by any Research Funding organization,

Accordance/Ethical Guidelines Statement

All the procedures involving human participants in this study were conducted in accordance with established ethical standards and relevant regulatory guidelines. The study adhered to the principles of the Declaration of Helsinki and complied with national and institutional requirements for research involving human subjects. Ethical approval was obtained from the selected Institutional Review Board prior to data collection. Participation was voluntary, and informed consent was obtained from all participants. Confidentiality and anonymity were ensured, and participants retained the right to withdraw at any stage without any consequences.

Clinical Trial

Clinical trial number: not applicable.'

Ethics approval: the study was approved by the Health Research Ethical Committees of the selected participating hospitals (Clearance Number NPHA/276/VOL.VI/067 FNHE/REC/VOL.11/075). . The Helsinki Declaration was followed in conducting the study. To ensure participant confidentiality, we refrained from collecting names, email addresses, or other contact

Consent to participate: Informed consent was obtained from all individual participants included in the study. All participants have provided consent to participate in the study. Respondents were informed about the study's objectives, data confidentiality, and their right to withdraw at any stage without consequences.

Consent to publish: All authors have read and approved the final version of the manuscript.

Competing interests

The authors declare no competing interests.

Data availability

The data that support the findings of this study are available from the corresponding author upon reasonable request. Declarations:

References

1. Yiwei X. Evaluating the efficacy of music-based therapy in children and adolescents with physical and mental health challenges: a systematic review. *Psychol Res Behav Manag*. 2025;18:1181–98.
2. Aalbers S, Vink A, Freeman RE, Pattiselanno K, Spreen M, van Hooren S. Development of an improvisational music therapy intervention for young adults with depressive symptoms: an intervention mapping study. *Arts Psychother*. 2019;65:101584. 10.1016/j.aip.2019.101584.
3. Agres K, Schaefer R, Volk A, van Hooren S, Holzapfel A, Dalla Bella S, et al. Music, computing, and health: a roadmap for the current and future roles of music technology for healthcare and well-being. *Music Sci*. 2020;4:1–14.
4. Lu G, Jia R, Liang D, Yu J, Wu Z, Chen C. Effects of music therapy on psychiatric symptoms and quality of life: a meta-analysis. *J Psychiatr Res*. 2021;304:114137. 10.1016/j.psychres.2021.114137.
5. Fadele KP, Igwe SC, Toluwalogo NO, Udokang EI, Ogaya JB, Lucero-Prisno DE III. Mental health challenges in Nigeria: bridging the gap between demand and resources. *Camb Prisms Glob Ment Health*. 2024;11:e29. 10.1017/gmh.2024.19.
6. Jack-Ide IO, Uys LR. Barriers to mental health services utilization in the Niger Delta region of Nigeria. *Int J Ment Health Nurs*. 2013;22(2):134–43. 10.1111/j.1447-0349.2012.00838.x.
7. Mercier LJ, Langelier DM, Buchanan J, Robinson S, Plamondon S. Development and integration of a music therapy program in the neurologic inpatient setting: a qualitative study. *Disabil Rehabil*. 2025;47(9):2304–13. 10.1080/09638288.2024.2393439.

8. Esplen MJ, Foster B, Pearson S, Wong J, Mackinnon C, Shamsudeen I, et al. A survey of oncology healthcare professionals' knowledge and attitudes toward the use of music as a therapeutic tool in healthcare. *Support Care Cancer*. 2020;28(1):381–8. 10.1007/s00520-019-04812-2.
9. Golden TL, Tetreault E, Ray CE, Kuge MN, Tiedemann A, Magsamen S. The state of music-based interventions for mental illness: thought leaders on barriers, opportunities, and the value of interdisciplinarity. *Community Ment Health J*. 2022;58(3):487–98. 10.1007/s10597-021-00843-4.
10. Hegde S. Music therapy for mental disorder and mental health: the untapped potential of Indian classical music. *BJPsych Int*. 2017;14(2):31–3. 10.1192/S2056474000001732.
11. Golden TL, Springs S, Kimmel HJ, Gupta S, Tiedemann A, Sandu CC, et al. The use of music in the treatment and management of serious mental illness: a global scoping review of the literature. *Front Psychol*. 2021;12:649840. 10.3389/fpsyg.2021.649840.
12. Bruscia KE. *Defining music therapy*. 3rd ed. Gilsum (NH): Barcelona; 2014.
13. Mugenda OM, Mugenda AG. *Research methods: quantitative and qualitative approaches*. Nairobi: Acts; 2003.