



Effects Of Psychiatric Clinical Experience On Knowledge, Perceptions, And Attitudes Toward People With Mental Illness Among Students In Akwa Ibom State, Nigeria

Peace N. Iheanacho¹, Inimfon Christopher Nicholas¹, Obiageli T. Madu¹, Pleasure N. Ogbonna¹, Ngozi P. Ogbonnaya¹, Olive U. Chijioke^{2*}, Nneka Ubochi¹, Maranatha Anudu³, Echezona N.D. Ekechukwu.^{3,4,5}

¹ Department of Nursing Sciences, Faculty of Health Sciences and Technology, College of Medicine, University of Nigeria

² Department of Health Administration and Management, Faculty of Health Sciences and Technology, College of Medicine, University of Nigeria;

³ Department of Medical Rehabilitation, Faculty of Health Sciences and Technology, College of Medicine, University of Nigeria

⁴ Occupational and Environmental Health Unit, Institute of Public Health, College of Medicine, University of Nigeria;

⁵ LANCET Physiotherapy, Wellness, and Research Centre, Enugu, Nigeria.

*Corresponding Author:

Dr. Olive Udunma Chijioke,
olive.chijioke@unn.edu.ng

Abstract

Background: Mental illness remains highly stigmatized globally despite increasing awareness of its burden. Clinical students play a critical role in mental healthcare delivery; however, misconceptions and negative attitudes toward people living with mental illness may compromise quality of care. This study assessed changes in knowledge, perceptions, and attitudes of nursing students before and after psychiatric clinical experience in Akwa Ibom State, Nigeria.

Methods: A pre–post quasi-experimental study was conducted among Year-2 nursing students in Akwa Ibom State. Participants completed structured questionnaires before and after an eight-week psychiatric clinical placement. Data collected included socio-demographic characteristics, knowledge of mental illness, perceptions of mental illness, and attitudes toward people with mental illness across six domains: benevolence, separatism, stereotyping, restrictiveness, pessimistic prediction, and stigmatization. Descriptive statistics summarized participant characteristics, while paired t-tests assessed changes between pre- and post-placement scores. Statistical significance was set at $p < 0.05$.

Results: A total of 290 students completed the pre-test and 281 completed the post-test assessment. Before clinical placement, 71% of participants demonstrated low knowledge of mental illness; following placement, approximately 72% attained high knowledge levels. Mean knowledge scores

increased significantly from 12.64 ± 2.0 to 14.14 ± 1.9 ($t=9.44$, $p=0.001$). Perception scores also improved significantly from 24.34 ± 3.5 to 26.63 ± 2.6 ($t=8.37$, $p=0.001$). The proportion of students exhibiting positive perceptions increased from 31% before placement to 68% after placement. However, no significant changes were observed across attitude domains including benevolence, separatism, stereotyping, restrictiveness, pessimistic prediction, and stigmatization (all $p>0.05$).

Conclusion: Psychiatric clinical experience significantly improved nursing students' knowledge and perceptions regarding mental illness but had limited influence on deeply rooted attitudinal dimensions. Nursing curricula should incorporate targeted anti-stigma interventions alongside clinical placements to facilitate meaningful attitudinal change.

Keywords: Mental illness, Nursing students, Psychiatric clinical placement, Knowledge, Perception, Attitude, Stigma, Nigeria.

1. Introduction

Mental disorders are among the leading causes of disability and disease burden globally, affecting hundreds of millions of people across all age groups, cultures, and socioeconomic settings.¹ Beyond their direct clinical manifestations, mental illnesses exert profound social, economic, and psychological consequences on affected individuals, families, healthcare systems, and society at large.² Individuals living with mental disorders frequently experience diminished quality of life, impaired social functioning, reduced educational and employment opportunities, and increased risks of morbidity and premature mortality.³ Despite substantial advances in psychiatric research, pharmacological therapies, and psychosocial interventions over recent decades, the benefits of these scientific developments have not been fully realized because many individuals continue to encounter stigma, discrimination, and barriers to accessing appropriate care.⁴ Consequently, the challenge of mental illness extends beyond disease management to include the broader societal attitudes that shape how affected individuals are perceived and treated.

The persistence of stigma toward people with mental illness remains one of the most significant obstacles to effective mental healthcare globally.⁵ Negative stereotypes commonly portray individuals with mental disorders as dangerous, unpredictable, incapable of making rational decisions, socially undesirable, or unlikely to recover.⁶ Such beliefs often result in social exclusion, diminished self-esteem, delayed help-seeking behavior, poor treatment adherence, and reduced opportunities for education, employment, and community participation. Importantly, stigma is not confined to the general population. Studies conducted across diverse healthcare settings have shown that stigmatizing beliefs may also be present among healthcare professionals and trainees, influencing their interactions with patients and potentially compromising the quality of care delivered.⁷⁻⁹ This observation suggests that improving mental healthcare outcomes requires not only advances in clinical treatment but also transformation in the attitudes and perceptions of those responsible for providing care.

Among healthcare professionals, nurses occupy a particularly influential position in mental health service delivery.¹⁰ Nurses often spend more time with patients than any other healthcare provider, serving as key agents of assessment, treatment, patient advocacy, and psychosocial support. The effectiveness of these roles depends substantially on nurses' knowledge, perceptions, and attitudes toward mental illness. From a theoretical standpoint, healthcare providers who possess accurate knowledge and positive perceptions are more likely to demonstrate empathy, establish therapeutic relationships, communicate effectively, and support recovery-oriented care.¹¹ Conversely, inadequate knowledge and negative attitudes may foster fear, avoidance, social distancing, and discriminatory practices that undermine patient outcomes.¹² Therefore, the quality of mental healthcare delivered within any health system is closely linked to the preparedness and attitudes of its nursing workforce.

Nursing students represent the future cadre of healthcare professionals who will encounter individuals with mental illness across a wide range of clinical settings. However, students often commence their professional education with pre-existing beliefs shaped by family influences, cultural norms, religious interpretations, media portrayals, and societal narratives regarding mental illness.¹³ Repeated observations across different countries have shown that such influences frequently contribute to misconceptions, fear, stereotyping, and pessimistic expectations regarding recovery. The persistence of these misconceptions among nursing students suggests that professional education must do more than provide theoretical knowledge; it must also address deeply rooted social and cultural beliefs that influence attitudes and behaviors toward individuals with mental illness.

Psychiatric education and clinical exposure have been widely advocated as important mechanisms for improving mental health literacy and reducing stigma among healthcare trainees.¹⁴ The underlying rationale is that direct interaction with individuals experiencing mental illness may challenge stereotypes by exposing students to realities that differ from commonly held assumptions. Through clinical placements, students observe patients' responses to treatment, witness recovery processes, and engage in therapeutic interactions that humanize mental illness. Inductively, numerous educational experiences have demonstrated that meaningful contact with stigmatized populations often promotes understanding, empathy, and acceptance. These observations have led educators to hypothesize that psychiatric clinical experience may positively influence students' knowledge, perceptions, and attitudes toward mental illness.

Nevertheless, existing evidence presents a complex picture. While several studies have reported significant improvements in mental health knowledge and reductions in stigma following psychiatric training,^{15,16} others have found only modest or inconsistent attitudinal changes.^{17,18} This inconsistency suggests that knowledge acquisition alone may not automatically translate into attitudinal transformation. Attitudes are multifaceted constructs influenced by emotional responses, personal experiences, cultural beliefs, and social norms, many of which may persist despite educational exposure. The variability in previous findings therefore raises important questions regarding the extent to which psychiatric clinical placements are capable of transforming students' perceptions and attitudes, particularly within different cultural and healthcare contexts.

The Nigerian context provides a particularly important setting in which to explore these questions. Mental illness remains highly stigmatized in many communities, where supernatural, spiritual, and moral explanations for psychiatric disorders continue to coexist alongside biomedical understandings.¹⁹ Such beliefs may shape the attitudes of healthcare trainees before they enter professional practice and may influence how they respond to psychiatric education. Although nursing curricula incorporate psychiatric training, there remains limited empirical evidence regarding the effectiveness of clinical placements in modifying students' knowledge, perceptions, and attitudes toward people living with mental illness. Furthermore, studies examining these relationships in Akwa Ibom State are scarce, creating an important gap in the literature.

Given the central role of nurses in mental healthcare delivery, the persistence of stigma toward mental illness, and the inconsistent evidence regarding the impact of psychiatric clinical experience on attitudinal change, there is a compelling need to evaluate the educational effectiveness of psychiatric clinical placements among nursing students. Understanding whether and how clinical exposure influences knowledge, perceptions, and attitudes will provide evidence to guide curriculum development, strengthen mental health education, and inform interventions aimed at reducing stigma within healthcare settings. Therefore, this study assessed changes in knowledge, perceptions, and attitudes toward people with mental illness among nursing students before and after psychiatric clinical experience in Akwa Ibom State, Nigeria.

METHODS

Study Design

This study employed a quasi-experimental one-group pretest–posttest design to assess changes in nursing students' knowledge, perceptions, and attitudes toward people living with mental illness following psychiatric clinical experience. The design enabled the measurement of baseline characteristics before psychiatric exposure and comparison with outcomes observed after completion of the clinical placement.²⁰

Study Setting

The study was conducted in Akwa Ibom State, Nigeria, among nursing students undertaking psychiatric clinical placement at the School of Post-Basic Psychiatric Nursing and Psychiatric Hospital, Eket. The psychiatric hospital is the major specialist mental health facility in the state and serves as a referral center for psychiatric services and clinical training. Participants were recruited from the three accredited Schools of Nursing in Akwa Ibom State: School of Nursing, Uyo (Anua); School of Nursing, Eket; and School of Nursing, Ikot Ekpene. These institutions provide basic nursing education and routinely send students for psychiatric clinical postings at the Psychiatric Hospital, Eket.

Study Population

The target population consisted of all student nurses enrolled in the three Schools of Nursing in Akwa Ibom State. The accessible population comprised second-year nursing students scheduled for psychiatric clinical posting during the study period. According to school records, the total population of nursing students across the three institutions was 874.

Sample Size Determination and Sampling

The sample size was calculated using Taro Yamane's formula for finite populations:21

$$n = \frac{N}{1 + N(e)^2}$$

where n represents the sample size, N the study population (874 students), and e the level of precision (0.05). The calculated minimum sample size was 274 students. To account for potential non-response, an additional 10% was added, resulting in a final sample size of 290 participants.

A census approach was subsequently employed whereby all eligible second-year students undergoing psychiatric clinical placement during the study period were recruited. A total of 290 students completed the baseline assessment, while 281 completed the post-intervention assessment.

Eligibility Criteria

Participants were eligible if they were second-year nursing students enrolled in one of the three Schools of Nursing in Akwa Ibom State, had completed the first year and first semester of the second year of training, were scheduled for psychiatric clinical posting, and had not previously undergone psychiatric clinical placement. Students who declined participation or failed to complete either the pretest or posttest assessment were excluded.

Study Instrument

Data were collected using a structured self-administered questionnaire adapted from previously validated instruments and modified to suit the study objectives. The questionnaire consisted of four sections.

The first section elicited socio-demographic information, including age, sex, marital status, religion, and previous contact with individuals living with mental illness. The second section assessed knowledge of mental illness using 20 items with response options of "Yes," "No," and "Not Sure." Correct responses were awarded one point, whereas incorrect and "Not Sure" responses received zero points. Total scores ranged from 0 to 20. Scores greater than 14 were classified as high knowledge, while scores below 14 were classified as low knowledge. The third section assessed perceptions of mental illness using a researcher-developed perception scale. Total perception scores greater than 26 were categorized as positive perceptions, whereas scores below 26 were categorized as negative perceptions. The fourth section evaluated attitudes toward people living with mental illness using an attitude scale comprising six domains: benevolence, separatism, stereotyping, restrictiveness, pessimistic prediction, and stigmatization. High scores on benevolence and low scores on the remaining domains indicated more favorable attitudes toward individuals with mental illness.

Validity and Reliability

Face and content validity were established through expert review by the project supervisor and two specialists in mental health and psychiatric nursing. The experts evaluated the relevance, clarity, Vol. 30 No.08 (2022): JPTCP (01-15)

comprehensiveness, and appropriateness of questionnaire items relative to the study objectives. Recommended modifications were incorporated before final administration.

Reliability testing was conducted through a pilot study involving 10% of the calculated sample size. Twenty-nine second-year student midwives from the School of Midwifery, Anua, Uyo, who were not included in the main study, completed the questionnaire on two occasions separated by a two-week interval. Test-retest reliability was assessed using Spearman-Brown rank correlation analysis, yielding a reliability coefficient of 0.90, indicating excellent stability and internal consistency of the instrument.²²

Data Collection Procedure

Data collection was conducted in two phases. During the first phase, baseline (pretest) questionnaires were administered immediately before the commencement of psychiatric clinical placement. Students were approached during classroom sessions after verification of their academic level and confirmation that they had not previously participated in psychiatric clinical postings. The objectives of the study and procedures for completing the questionnaire were explained, and completed questionnaires were collected immediately after administration.

Following the baseline assessment, participants underwent an eight-week psychiatric clinical placement at the School of Post-Basic Psychiatric Nursing and Psychiatric Hospital, Eket. The clinical experience involved supervised interactions with psychiatric patients, direct participation in patient care activities, clinical observation, case discussions, ward-based learning experiences, and mentorship by psychiatric nursing professionals. Upon completion of the eight-week placement, the same questionnaire was re-administered to the participants as a posttest assessment. Completed questionnaires were collected on the same day by the researcher and trained research assistants.

Outcome Measures

The primary outcomes were changes in knowledge, perceptions, and attitudes toward people living with mental illness following psychiatric clinical experience. Knowledge outcomes were categorized as high or low using a cut-off score of 14. Perception outcomes were categorized as positive or negative using a cut-off score of 26. Attitude outcomes were assessed using mean scores across the six attitudinal domains of benevolence, separatism, stereotyping, restrictiveness, pessimistic prediction, and stigmatization.

Ethical Considerations

Ethical approval was obtained from the Akwa Ibom State Health Research Ethics Committee prior to commencement of the study. Administrative permission was secured from the relevant training institutions and the School of Post-Basic Psychiatric Nursing, Eket. Written informed consent was obtained from all participants after a detailed explanation of the study objectives and procedures. Participation was voluntary, and respondents were informed of their right to decline or withdraw at any stage without penalty. Confidentiality and anonymity were maintained throughout the study, and all information obtained was used solely for research purposes.

Statistical Analysis

Data were entered and analyzed using IBM Statistical Package for the Social Sciences (SPSS) version 25. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to summarize participant characteristics and study variables. Knowledge and perception categories were summarized using frequencies and percentages, whereas attitude domain scores were expressed as means and standard deviations. Differences between pretest and posttest knowledge, perception, and attitude scores were assessed using paired-sample t-tests. Statistical significance was set at $p < 0.05$.

Results

Participant Characteristics

A total of 290 nursing students participated in the pre-test assessment, while 281 completed the post-test assessment following psychiatric clinical placement, representing a retention rate of 96.9%. Female students constituted the majority of participants at both assessments, accounting for 79.3% (n = 230) at pre-test and 85.1% (n = 239) at post-test. Most participants were aged between 21 and 30 years, with mean ages of 22.55 ± 4.12 years at pre-test and 22.03 ± 4.21 years at post-test. The majority of respondents were married (90.0% and 91.8% at pre-test and post-test, respectively) and identified as Christians (92.1% and 85.1%, respectively). Regarding ethnicity, Ibibio participants constituted the largest proportion at baseline (49.5%), whereas Anang participants predominated at post-test (58.9%). Classroom teaching was the principal source of information on mental health for most respondents, increasing from 84.9% at baseline to 97.9% following clinical placement. Furthermore, a substantial proportion of participants reported previous interaction with individuals living with mental illness, accounting for 79.4% at pre-test and 79.5% at post-test. Overall, the socio-demographic characteristics of participants remained largely comparable between the two assessment periods as shown in table 1.

Table 1. Socio-demographic Characteristics of Participants at Pre-test and Post-test

Variable	Category	Pre-test n (%) (N=290)	Post-test n (%) (N=281)
Gender	Male	60 (20.6)	42 (14.9)
	Female	230 (79.3)	239 (85.1)
Age Group (years)	<20	116 (40.2)	132 (46.8)
	21–30	156 (53.6)	135 (48.2)
	31–40	17 (5.8)	13 (4.6)
	>40	1 (0.3)	1 (0.4)
	Mean $\pm$ SD	22.55 ± 4.12	22.03 ± 4.21
Marital Status	Single	29 (10.0)	23 (8.2)
	Married	261 (90.0)	258 (91.8)
Religion	Christianity	267 (92.1)	239 (85.1)
	Islam	18 (6.2)	42 (14.9)
	Other*	5 (1.7)	–
Ethnicity	Ibibio	143 (49.5)	85 (30.5)
	Anang	83 (28.5)	166 (58.9)
	Igbo	32 (11.0)	7 (2.5)
	Oron	22 (7.6)	19 (6.7)
	Yoruba	8 (2.7)	2 (0.7)
	Ijaw	2 (0.7)	2 (0.7)
Main Source of Mental Health Information	Classroom	247 (84.9)	276 (97.9)
	Social Media	21 (7.5)	4 (1.4)
	Academic Journal	9 (3.1)	2 (0.7)
	Other Sources†	13 (4.5)	–

Variable	Category	Pre-test n (%) (N=290)	Post-test n (%) (N=281)
Previous Interaction with a Person with Mental Illness	Yes	231 (79.4)	224 (79.5)
	No	60 (20.6)	58 (20.6)

*Tr*Other = Atheist and African Traditional Religion.*

†Other Sources = News journals, electronic broadcast media, and informal discussions.

Knowledge of Mental Illness

At baseline, a high proportion of respondents demonstrated correct knowledge regarding several aspects of mental health, including the need for psychological or psychiatric services following a diagnosis of mental illness (97.2%), the fact that many individuals with mental illness may be unaware of their condition (96.2%), and the importance of supportive psychological therapy in treatment (94.8%). Similarly, most participants correctly recognized that mental illness can occur at any age (93.4%), that mental health encompasses positive attitudes and healthy relationships (89.0%), and that stress-related factors may contribute to mental illness (88.6%).

Following psychiatric clinical placement, knowledge levels remained high across most domains. The proportion of respondents who correctly identified the need for psychiatric services following diagnosis (95.9%), the role of supportive psychological therapy (90.7%), and the possibility of mental illness occurring at any age (88.3%) remained substantial. Improvements were observed in knowledge related to depression, adverse effects of psychiatric medications, antidepressant treatment, and the impact of psychological disorders on academic performance. Overall, the mean knowledge score increased from 12.64 ± 2.00 at pre-test to 14.14 ± 1.90 at post-test as shown in table 2.

Table 2. Knowledge of Mental Illness Among Student Nurses Before and After Psychiatric Clinical Experience

Knowledge Item	Pre-test n (%)	Post-test n (%)
Exercise sustains mental health	245 (84.5)	243 (84.1)
Wrong reasoning may contribute to mental health problems	153 (52.8)	145 (53.3)
Many individuals with mental illness are unaware of their condition	279 (96.2)	273 (94.5)
Mental illness may be caused by stress-related factors	257 (88.6)	237 (82.1)
Mental health includes positive attitudes and relationships	258 (89.0)	252 (87.2)
Psychological/psychiatric services are needed when mental illness is diagnosed	282 (97.2)	277 (95.9)
Mental illness can occur at any age	271 (93.4)	255 (88.3)
Hallucinations are a symptom of schizophrenia	252 (89.9)	243 (84.1)
Family history increases the risk of mental disorders	260 (89.7)	242 (83.8)
Bad temper may indicate a psychiatric problem	240 (82.8)	244 (84.5)
Supportive psychological therapy is needed in treating mental illness	275 (94.8)	262 (90.7)
Sertraline is an antidepressant medication	223 (77.6)	230 (79.3)
Overall knowledge score (Mean $\pm$ SD)	12.64 ± 2.00	14.14 ± 1.90

Perceptions of Mental Illness

Overall, participants demonstrated a positive perception of mental illness at baseline, with a mean perception score of 3.02, which increased to 3.33 following psychiatric clinical placement. Before the clinical experience, respondents strongly agreed that anyone could develop mental illness at any time (3.69 ± 0.69), while positive perceptions were also observed regarding the ability of people with mental illness to marry and have children (3.27 ± 0.83) and to engage in productive work (3.08 ± 0.90).

Following psychiatric clinical exposure, improvements were observed across most perception domains. The highest mean score was recorded for the belief that anyone can develop mental illness (3.83 ± 0.70), followed by the perception that people with mental illness can engage in friendships (3.61 ± 0.73) and can marry and have children (3.41 ± 0.71). Notable increases were also observed in perceptions relating to the work capabilities of individuals with mental illness and the recognition that mental illness is not necessarily reflected in physical appearance. Although respondents continued to express some concerns regarding the dangerousness of people with mental illness, the overall pattern of responses suggests that psychiatric clinical experience contributed to more favorable and informed perceptions toward individuals living with mental illness as shown in table 3.

Table 3. Perceptions of Mental Illness Among Student Nurses Before and After Psychiatric Clinical Experience

Perception Item	Pre-test Mean $\pm$ SD (N=290)	Post-test Mean $\pm$ SD (N=281)
People with mental illness are capable of working	3.08 ± 0.90	3.12 ± 0.70
Anybody can develop mental illness at any time	3.69 ± 0.69	3.83 ± 0.70
People with mental illness can marry and have children	3.27 ± 0.83	3.41 ± 0.71
People with mental illness should be blamed for their condition	3.27 ± 0.83	3.22 ± 0.73
Mental illness is reflected in physical appearance	2.51 ± 0.85	3.07 ± 0.84
People with mental illness are usually dangerous	2.40 ± 0.81	2.98 ± 1.06
People with mental illness cannot engage in friendships	2.97 ± 0.90	3.61 ± 0.73
Overall perception score	3.02	3.33

Attitudes Toward People with Mental Illness

At baseline, the mean benevolence score was 24.63 ± 5.16 , which increased slightly to 25.00 ± 4.90 following clinical placement, indicating a modest improvement in compassionate and supportive attitudes toward individuals with mental illness. The mean stigmatization score also decreased from 7.13 ± 4.31 at pre-test to 6.58 ± 2.88 at post-test, suggesting a reduction in stigmatizing attitudes after psychiatric exposure. Similarly, slight reductions were observed in stereotyping (10.33 ± 2.97 vs. 10.01 ± 2.86) and restrictiveness (8.74 ± 2.84 vs. 8.53 ± 2.97), indicating marginal improvements in participants' perceptions regarding the capabilities and social freedoms of people living with mental illness. However, the mean scores for separatism increased slightly from 25.02 ± 5.38 to 25.36 ± 5.12 , while pessimistic prediction increased from 12.10 ± 3.42 to 12.27 ± 3.49 , suggesting persistence of some negative beliefs concerning social distance and recovery prospects among individuals with mental illness as shown in table 4.

Table 4: Attitudes Toward People with Mental Illness Among Student Nurses Before and After Psychiatric Clinical Experience

Attitude Domain	Cut-off Score	Pre-test Mean $\pm$ SD (N=290)	Post-test Mean $\pm$ SD (N=281)
Benevolence	25	24.63 $\pm$ 5.16	25.00 $\pm$ 4.90
Separatism	10	25.02 $\pm$ 5.38	25.36 $\pm$ 5.12
Stereotyping	10	10.33 $\pm$ 2.97	10.01 $\pm$ 2.86
Restrictiveness	20	8.74 $\pm$ 2.84	8.53 $\pm$ 2.97
Pessimistic prediction	10	12.10 $\pm$ 3.42	12.27 $\pm$ 3.49
Stigmatization	10	7.13 $\pm$ 4.31	6.58 $\pm$ 2.88

Benevolence scale comprised 10 items; separatism, stereotyping, pessimistic prediction, and stigmatization each comprised 4 items, while restrictiveness comprised 8 items. Higher benevolence scores indicate more positive attitudes, whereas higher scores in the other domains indicate less favorable attitudes toward people with mental illness.

Effect of Psychiatric Clinical Experience on Knowledge, Perceptions, and Attitudes Toward Mental Illness

The findings revealed a statistically significant improvement in participants' knowledge of mental illness following clinical placement. The mean knowledge score increased from 12.64 ± 2.00 at pre-test to 14.14 ± 1.90 at post-test ($t = 9.44$, $p < 0.001$). Similarly, perceptions toward people with mental illness improved significantly after psychiatric exposure, with the mean perception score increasing from 24.34 ± 3.50 to 26.63 ± 2.60 ($t = 8.37$, $p < 0.001$). In contrast, no statistically significant changes were observed across the various attitude domains. Although the mean benevolence score increased slightly from 24.67 ± 5.10 to 24.99 ± 4.90 , the difference was not statistically significant ($t = 0.74$, $p = 0.452$). Likewise, separatism showed a marginal increase from 25.04 ± 5.40 to 25.36 ± 5.10 ($t = 0.75$, $p = 0.455$), while stereotyping decreased slightly from 10.32 ± 3.00 to 10.00 ± 2.90 ($t = 1.29$, $p = 0.199$). Restrictiveness also showed a small reduction from 8.74 ± 2.80 to 8.53 ± 3.00 ($t = 0.86$, $p = 0.392$). Furthermore, no significant differences were found in pessimistic prediction (12.10 ± 3.40 vs. 12.27 ± 3.50 ; $t = 0.40$, $p = 0.687$) or stigmatization scores (7.13 ± 4.50 vs. 6.58 ± 2.90 ; $t = 1.67$, $p = 0.096$) as shown in table 5.

Table 5. Comparison of Knowledge, Perception, and Attitude Scores Before and After Psychiatric Clinical Experience

Outcome Domain	Pre-test Mean $\pm$ SD (N=290)	Post-test Mean $\pm$ SD (N=281)	t-value	p-value
Knowledge	12.64 $\pm$ 2.00	14.14 $\pm$ 1.90	9.44	<0.001*
Perception	24.34 $\pm$ 3.50	26.63 $\pm$ 2.60	8.37	<0.001*
Attitude Domains				
Benevolence	24.67 $\pm$ 5.10	24.99 $\pm$ 4.90	0.74	0.452
Separatism	25.04 $\pm$ 5.40	25.36 $\pm$ 5.10	0.75	0.455
Stereotyping	10.32 $\pm$ 3.00	10.00 $\pm$ 2.90	1.29	0.199
Restrictiveness	8.74 $\pm$ 2.80	8.53 $\pm$ 3.00	0.86	0.392
Pessimistic prediction	12.10 $\pm$ 3.40	12.27 $\pm$ 3.50	0.40	0.687
Stigmatization	7.13 $\pm$ 4.50	6.58 $\pm$ 2.90	1.67	0.096

Statistically significant at $p < 0.05$.

Discussion

This study evaluated the influence of psychiatric clinical experience on nursing students' knowledge, perceptions, and attitudes toward people living with mental illness in Akwa Ibom State, Nigeria. The findings demonstrated that psychiatric clinical placement was associated with significant improvements in knowledge and perceptions of mental illness, whereas changes in attitudinal domains were relatively modest and did not reach statistical significance. These findings provide important evidence regarding the strengths and limitations of psychiatric clinical exposure as a strategy for preparing future nurses to deliver compassionate, evidence-based, and recovery-oriented mental healthcare.

One of the most important findings of this study was the significant improvement in knowledge of mental illness following psychiatric clinical placement. The mean knowledge score increased significantly from after clinical placement. Furthermore, students demonstrated high levels of understanding regarding the role of psychiatric services, the importance of supportive psychological therapies, the occurrence of mental illness across all age groups, and the contribution of psychosocial stressors to mental health disorders. From a deductive perspective, these findings support established educational theories which posit that knowledge acquisition is enhanced when theoretical instruction is reinforced through experiential learning.^{23,24} According to experiential learning theory, students construct deeper understanding when they are able to observe, participate, reflect, and apply theoretical concepts within authentic clinical environments. Psychiatric clinical placement offers such opportunities by allowing students to witness manifestations of mental illness, observe therapeutic interventions, and participate in patient care under professional supervision. Consequently, the observed improvement in knowledge is consistent with the theoretical expectation that direct clinical exposure strengthens cognitive learning beyond classroom instruction alone.

Inductively, the pattern of responses suggests that interaction with psychiatric patients enabled students to challenge misconceptions that may have been acquired from societal narratives, media portrayals, and cultural beliefs. Before exposure, several students appeared uncertain about aspects of mental illness relating to treatment outcomes, medication effects, and psychosocial consequences. Following placement, notable improvements were observed in these domains. This suggests that seeing patients receive treatment, recover functionality, and participate in therapeutic activities may have transformed abstract concepts into observable realities. Similar findings have been reported among nursing and medical students in several countries, where psychiatric rotations significantly improved mental health literacy and understanding of psychiatric disorders.^{25,26}

The importance of this finding extends beyond academic achievement. In many low- and middle-income countries, including Nigeria, misconceptions regarding the causes and treatment of mental illness remain widespread.²⁷ Mental disorders are frequently attributed to supernatural forces, spiritual attacks, witchcraft, or personal weakness.²⁸ Healthcare professionals who possess accurate knowledge are therefore essential for promoting evidence-based mental healthcare and countering misinformation within communities. The improvement observed in this study suggests that psychiatric clinical training may contribute to developing a workforce capable of addressing these persistent misconceptions.

The study also found a significant improvement in students' perceptions of mental illness following psychiatric clinical experience. The overall perception score increased after placement. Participants increasingly recognized that mental illness can affect anyone, that individuals living with mental illness are capable of working, maintaining friendships, marrying, and raising children, and that mental illness is not necessarily reflected in a person's physical appearance. These findings can be interpreted through the lens of the contact hypothesis, which proposes that meaningful interaction with members of stigmatized groups reduces prejudice and promotes understanding²⁹. Prior to clinical exposure, many students may have relied on indirect information obtained from media reports, cultural narratives, and societal stereotypes. Such sources often portray people with mental illness as incapable, dangerous, or socially dysfunctional. Psychiatric clinical placement provided opportunities for direct interaction with individuals experiencing mental illness, thereby replacing stereotypical assumptions with lived observations.

The findings provide empirical support for this theoretical proposition. Students who interacted with psychiatric patients developed more favorable perceptions regarding the social and functional capabilities of people living with mental illness. Inductively, this suggests that students observed patients engaging in conversations, participating in treatment programmes, maintaining interpersonal relationships, and demonstrating capacities that contradicted commonly held stereotypes. Such observations may have fostered recognition that mental illness exists on a continuum and that many affected individuals can lead meaningful and productive lives.

Particularly noteworthy was the improvement in perceptions concerning friendship and social relationships. Social exclusion remains one of the most damaging consequences of mental illness stigma. The finding that students increasingly viewed people with mental illness as capable of forming friendships suggests a reduction in perceptions of social otherness. This is encouraging because nurses frequently serve as advocates for social inclusion and recovery-oriented care.

Nevertheless, some reservations regarding dangerousness persisted after clinical exposure. Although perceptions improved overall, participants continued to express concerns about the potential dangerousness of people living with mental illness. This observation is consistent with international literature demonstrating that stereotypes linking mental illness to violence remain among the most persistent forms of stigma. Such beliefs may be reinforced by sensationalized media reporting that disproportionately focuses on rare incidents involving violence and psychiatric disorders. Therefore, while clinical exposure may improve understanding, additional educational interventions may be required to address deeply rooted fears and stereotypes.

Influence of Psychiatric Clinical Experience on Attitudes Toward People Living with Mental Illness

A particularly interesting finding of this study is the discrepancy between improvements in knowledge and perceptions and the relatively limited changes observed in attitudes. Although small improvements were observed in benevolence, stigmatization, stereotyping, and restrictiveness, none of the attitude domains demonstrated statistically significant changes following psychiatric clinical placement. This finding suggests that attitudes may be more resistant to change than knowledge and perceptions.

Deductively, this observation aligns with established models of attitude formation. Attitudes comprise cognitive, emotional, and behavioral components.³⁰ While knowledge-based interventions primarily target cognition, attitudes are also influenced by emotions, values, cultural norms, religious beliefs, and long-standing social experiences. Consequently, acquiring accurate information about mental illness may not automatically translate into substantial attitudinal change. Students may intellectually understand that mental illness is treatable and that affected individuals can function productively while simultaneously retaining emotional reservations about social proximity or long-term recovery.

The findings support this interpretation. Although participants demonstrated increased knowledge and more favorable perceptions, scores for separatism and pessimistic prediction remained largely unchanged. Inductively, this suggests that some students continued to perceive people living with mental illness as socially distinct or less likely to achieve full recovery. One possible explanation is that students primarily encountered individuals during acute episodes of illness within institutional settings. Exposure to severe psychiatric symptoms without equivalent exposure to recovered individuals living successfully in the community may unintentionally reinforce perceptions of chronic disability or dependence.

Another plausible explanation relates to the duration of exposure. The psychiatric clinical experience lasted approximately eight weeks, which may be sufficient to improve knowledge but insufficient to transform attitudes that have developed over many years. Attitudes are often shaped by family beliefs, cultural narratives, religious teachings, community experiences, and media representations.³¹ Such deeply ingrained beliefs may require repeated exposure, guided reflection, and structured anti-stigma interventions before substantial change can occur.

This finding is consistent with studies,^{32,33} reporting that psychiatric education alone may improve mental health literacy without producing corresponding reductions in stigma. Conversely, studies incorporating direct contact with recovered service users, reflective learning activities, and anti-

stigma workshops have reported greater attitudinal improvements. Therefore, the present findings suggest that psychiatric clinical placement should be viewed as a necessary but not sufficient component of stigma reduction among healthcare trainees.

Implications for Nursing Education and Mental Healthcare Practice

The findings of this study have important implications for nursing education, curriculum development, and mental healthcare delivery. First, the significant improvements in knowledge and perceptions highlight the value of psychiatric clinical placements in undergraduate nursing education. These experiences provide opportunities for experiential learning that complement classroom instruction and enhance students' understanding of mental illness.

Second, the persistence of some negative attitudes indicates a need for more comprehensive educational approaches. Nursing curricula should incorporate structured anti-stigma interventions, reflective practice sessions, service-user narratives, and recovery-oriented teaching strategies. Exposure to individuals who have successfully recovered from mental illness may be particularly effective in challenging pessimistic beliefs and reducing social distancing tendencies.

Third, improving nursing students' attitudes toward mental illness has implications for patient outcomes. Nurses frequently represent the first point of contact for individuals seeking mental healthcare. Positive attitudes facilitate therapeutic relationships, improve communication, enhance treatment adherence, and contribute to patient satisfaction. Conversely, stigmatizing attitudes may discourage help-seeking, reduce quality of care, and perpetuate discrimination within healthcare settings.

Finally, given the substantial mental health treatment gap in Nigeria and many other low- and middle-income countries, educational interventions that strengthen mental health literacy among future healthcare professionals are critical for improving access to quality mental healthcare services.

Strengths and Limitations

A major strength of this study is its pretest–posttest design, which enabled direct assessment of changes associated with psychiatric clinical experience. The inclusion of nursing students from multiple training institutions also enhances the relevance of the findings to nursing education within the study setting. Additionally, the use of standardized measures to assess knowledge, perceptions, and attitudes provided a comprehensive evaluation of the impact of psychiatric exposure.

However, several limitations should be acknowledged. The absence of a control group limits causal inference and makes it difficult to exclude the influence of external factors. The study relied on self-reported data, which may be affected by social desirability bias, particularly during post-intervention assessment. Furthermore, the post-test evaluation was conducted immediately after clinical placement, preventing assessment of the long-term sustainability of the observed changes. Future studies should incorporate control groups, longer follow-up periods, and qualitative methods to explore the mechanisms through which psychiatric exposure influences students' attitudes and beliefs.

Conclusion

The findings of this study indicate that psychiatric clinical experience is effective in improving nursing students' knowledge and perceptions of mental illness but has limited impact on deeply rooted attitudes toward people living with mental illness. While clinical exposure enhanced mental health literacy and fostered more favorable perceptions regarding the capabilities and social roles of affected individuals, significant attitudinal transformation was not observed. These findings suggest that improving attitudes toward mental illness requires educational approaches that extend beyond conventional clinical placement and incorporate targeted anti-stigma strategies, reflective learning, and sustained contact with individuals experiencing recovery. Such multifaceted interventions are essential for preparing future nurses to provide compassionate, person-centered, and recovery-oriented mental healthcare.

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