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Stigmatization of Mental Illness among African Immigrant Nurses and its Association with Occupational Burnout

A dissertation submitted in partial satisfaction of the

requirements for the degree Doctor of Philosophy

in Nursing

by

Bantale Oluremi Ayisire

2024

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ABSTRACT OF THE DISSERTATION

Stigmatization of Mental Illness among African Immigrant Nurses and Its Association with Occupational Burnout

by

Bantale Oluremi Ayisire

Doctor of Philosophy in Nursing

University of California, Los Angeles, 2024

Professor Janet C. Mentes, Chair

This dissertation features the three-manuscript option.

Stigmatization toward people with mental illness is a global problem that has been shown to have negative impact on the quality of life of those affected. In African countries, beliefs in supernatural causes of mental illness is a major driver of societal perceptions towards mental illness. Some healthcare professionals have also been found to share similar perceptions towards patients with mental illness and that the mechanisms of stigma can be redirected towards healthcare professionals, including nurses, who care for people with mental illness. This phenomenon is known as 'associative stigma.' Many African immigrant nurses are employed as mental health professionals and are dissatisfied and burned out at work, which may be exacerbated by associative stigma. Little is known about these types of stigma among African

immigrant nurses based in the United States. Thus, the purpose of this study was to explore stigma towards individuals with mental illness among U.S.-based African immigrant nurses, the experiences of associative stigma among U.S.-based African immigrant nurses and the association with occupational burnout; and determine whether experiences of associative stigma was related to increased stigmatizing behaviors towards individuals with mental illness. The study was a cross-sectional survey assessing stigma among 73 U.S.-based African immigrant registered nurses and nurse practitioners recruited using voluntary response and snowball sampling methods. The survey utilized the Opening Minds Stigma Scale for Healthcare Providers (OMS-HC) to measure stigma, Clinicians' Associative Stigma Scale (CASS) for associative stigma, Copenhagen Burnout Inventory (CBI) Scale for occupational burnout, and the modified Bicultural Involvement Questionnaire (M-BIQ) Scale measured the degree of acculturation. Statistical analyses using *t*-tests, ANOVA, and linear regression were conducted. Over three-fourths of the participants were female (76.7%, $n = 56$). Over half of the participants had more than ten years of experience as a nurse (54.8%, $n = 40$). The average age of the participants in the study was 47.19 years ($SD = 10.09$). The average age at migration of the participants was 26.46 years ($SD = 8.73$). The average time since migration was 20.42 years ($SD = 9.51$). The average stigma towards mental illness score was 30.22 points ($SD = 7.12$), which was a moderate level of stigma (range 15–75). The results of the study suggested that stigma of people with mental illness and occupational burnout have a significant positive association ($b = 0.16$, $p = 0.03$). Likewise, associative stigma of African immigrant nurses has a significant positive association with occupational burnout ($b = 0.61$, $p = 0.01$). These results implied that stigma toward persons with mental illness and the associative stigma experience of African immigrant nurses who care for them were associated with occupational burnout, and

interventions should target these areas in healthcare workplaces to reduce burnout, thereby increasing the quality of care these nurses provide.

The dissertation of Bantale Oluremi Ayisire is approved.

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Dedication

To God Almighty, who made the way for me, preserved my life, and gave me the strength to carry on regardless and complete this program.

To my husband, Dennis Ayisire; my children, Toma and Tobi Afolayan, and Vosa, Grace and Kessy Ayisire; and my grandchildren, Eli and Yoma, for their love and unwavering support.

To my late dad, whose values shaped my life, my mom, and my siblings, for their prayers.

To my friends, who supported and encouraged me throughout this journey.

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Acknowledgements

Author Contributions

Bantale O. Ayisire was the Principal Investigator for this research, and Janet Mentes served as the Academic Advisor/Committee Chair. Dissertation committee members credited as authors contributed to the research design, analysis, and interpretation of data, or assisted with revision of draft manuscripts. All authors approved final versions of the manuscripts.

Manuscript #1

Ayisire, B. O., Mentes, J. C., Robbins, W. A., Brecht, M., & Choi, K. (n.d.). An Integrative Review of Stigmatization of Mental Illness Among Healthcare Providers in Africa and Other Developing Regions. This manuscript is intended for submission to the *International Journal of Mental Health Nursing*, the official journal of the Australian College of Mental Health Nurses.

Manuscript #2

Ayisire, B. O., Mentes, J. C., Robbins, W. A., Brecht, M., & Choi, K. (n.d.). Stigma Towards Individuals with Mental Illness and Associative Stigma Experienced by African Immigrant Nurses in the United States. This manuscript is intended for submission to the *International Journal of Mental Health Nursing*, the official journal of the Australian College of Mental Health Nurses.

Manuscript #3

Ayisire, B. O., Mentes, J. C., Robbins, W. A., Brecht, M., & Choi, K. (n.d.) Relationship Between the Associative Stigma/Stigma towards Mental Illness Among U.S.-Based African Immigrant Nurses and Occupational Burnout. This manuscript is intended for submission to *Issues in Mental Health Nursing*.

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Chapter 1: Introduction

Stigma toward mental illness is a significant problem that negatively impacts the quality of life of persons with mental illness (Ubaka et al., 2018). The American Psychological Association's (APA) *Dictionary of Psychology* defines stigma as the unfavorable social perception linked to a personal trait that could be interpreted as a social, mental, or physical shortcoming (APA, 2018). Stigma involves social disapproval that can unjustly result in an individual being excluded and subjected to discrimination. Stigma towards persons with mental illness is concerning because one in five American adults (46.6 million) suffers from mental illness (Substance Abuse and Mental Health Services Administration [SAMHSA], 2018). Of this number, only 19.8 million (42.6%) received treatment in 2017 (SAMHSA, 2018). It is also estimated that 49.5% of adolescents had any mental disorder, of which 22.2% had severe conditions (Merikangas et al., 2010). In addition, the Centers for Disease Control and Prevention (CDC) reported that the coronavirus (COVID-19) pandemic had a significant negative impact on the mental health of U.S. citizens. Mitigation activities, such as lockdowns, physical distancing, and misinformation created increased mental health challenges, such as symptoms of anxiety disorder and depression. During the pandemic, the CDC reported that 40.9% of survey respondents reported at least one adverse mental or behavioral health condition, including symptoms of anxiety disorder or depression (30.9%). Also, up to 74.9% of respondents reported at least one adverse behavioral health symptom among the 18–24 years age group.

Despite these overwhelming statistics, societal stigmatization toward persons with mental illness persists as a global, and widespread problem, and mental healthcare providers are not exempted (Ubaka et al., 2018). One of the main barriers preventing individuals with mental illness from accessing mental health treatment was their fear of being stigmatized by medical

professionals (Ali & Agyapong, 2016; Shrivastava et al., 2012). Stigma has negative consequences for those who experience mental disorders, their families, and even medical professionals who treat mental health issues (Bonsu & Yendork, 2018; Picco et al., 2018). These have significant consequences for individuals with mental illness and their families, which include reluctance to seek care and treatment when needed, prolonged rehabilitation, low self-esteem, limited access to employment, housing, social relationships, distress, and low quality of life (Ubaka et al., 2017).

Culture is known to affect mental health stigma illness perception (Abdullah & Brown, 2011; Stefanovics et al., 2016). Particularly, sub-Saharan African countries are known to hold deeply ingrained stigma towards mental illness (Stefanovics et al., 2016). Given the significant proportion of African immigrants in the U.S. nursing workforce, it is important to consider how US-based African immigrant nurses express and experience stigma, which may ultimately affect patient care. Because of the paucity of research concerning stigmatization towards mental illness in this population, it is critical to examine the perceptions of African immigrant nurses towards mental illness, taking into consideration their level of acculturation, to understand the scope of the problem and areas in need of intervention. The scientific premise for this study is that there is significant relationship between stigma of providers, quality of care and treatment provided, and health outcomes for persons with mental illness, making it critical for the African immigrant providers to be aware of their stigmatization of mental illness. Yet this crucial issue has received little attention.

Stefanovics et al. (2016) compared beliefs and perceptions about mental illness among health professionals in five countries: the United States, Nigeria, Ghana, China, and Brazil. They found that there was relatively lesser stigmatization in the United States compared to the other

countries. The theorized reason for this finding was that the influence of advocacy and alliance groups campaigning against stigma had more impact. However, such information about advocacy is scanty in the other low-income countries. According to Adjorlolo et al. (2018), the degree of stigma expressed by providers is also significantly influenced by sociodemographic traits and culture. Results from a different earlier study carried out in Ghana demonstrated that mental health nurses with at least six years of experience displayed higher levels of stigma and were less empathetic toward individuals with mental illness. It was also revealed that male nurses who were 30 years of age or older held the belief that patients with mental illnesses should be held accountable for their disorders (Adjorlolo et al., 2018). These stereotypes are influenced or shaped by cultural settings and members of that culture hold those shared beliefs (Stefanovics et al., 2016).

In most African communities, perceptions of mental illness are defined by beliefs that mental disorders are caused by supernatural influences, such as demon possession, consequences of wrongdoings, witchcraft, or due to hatred by a family member or an acquaintance (Mosaku & Wallymahmed, 2017). People with mental illness are also believed to be unfortunate, unpredictable, and prone to violence, and consequently, their sickness can never be cured and should be segregated in the society (Mosaku & Wallymahmed, 2017). Healthcare professionals who are custodians of care and expected to be more knowledgeable about mental illness than people in society, also share the same cultural beliefs or even stronger negative beliefs and perceptions (Rössler, 2016). In cases where healthcare professionals like psychiatrists express positive attitudes towards individuals with mental illness, unfortunately, reduced willingness to have long term social relationships or social interaction with them is observed (Rössler, 2016). In other words, it is important to examine the degree of acculturation of African immigrant nurses

in the United States to understand how stigmatizing attitudes form and are dismantled, and to identify targets for future interventions to reduce such stigma.

A notable number of previous studies explained that stigma not only affected those with mental illnesses but could also develop from close association to these individuals, a phenomenon known as 'associative stigma' (Picco et al., 2018). Mental health professionals may be perceived less favorably than other health professionals due to associative stigma (Verhaeghe & Bracke, 2012). Because these clinicians are connected to people who are stigmatized in society rather than because of their own qualities, they encounter associative stigma (Chang et al., 2019; Verhaeghe & Bracke, 2012). Associative stigma is commonly related to components of occupational burnout that manifests as depersonalization, higher emotional exhaustion, and poorer job satisfaction (Chang et al., 2019). Previous studies revealed that self-esteem and professional identities are affected, which also impact career decisions and workplace retention (Chang et al., 2019). Overall, there is dual stigmatization of individuals with mental illness and their healthcare providers alike. Associative stigma and occupational burnout are known to be correlated with negative patient outcomes, so it is important for public health to learn more about the level of stigma this subgroup exhibits against those who are affected by mental illnesses.

Specific Aims

The purpose of this study was to examine stigma among U.S.-based African immigrant nurses and the relationship between associative stigma and occupational burnout in this population. Within psychiatric, general acute care, inpatient and outpatient hospital settings located in the United States, this study aimed to:

Aim 1: To determine whether there is a relationship between demographic characteristics of U.S.-based African immigrant nurses and stigma towards individuals with mental illness.

Hypothesis 1: Age, gender, age at migration, and time since migration of U.S.-based African immigrant nurses will be associated with stigma towards mental illness.

Hypothesis 2: The degree of acculturation of African immigrant nurses will be associated with stigma towards mental illness.

Aim 2: To examine the relationship between level of associative stigma experienced by African immigrant nurses and stigma toward people with mental illness.

Hypothesis 1: African immigrant nurses with higher associative stigma will have higher level stigma towards people with mental illness.

Aim 3: To examine the association between associative stigma will experience of U.S.-based African immigrant nurses and occupational burnout.

Hypothesis 1: U.S.-based African immigrant nurses who endorse higher levels of associative stigma experience higher levels of occupational burnout.

Theoretical Framework

This proposed study was guided by the Mental Illness Stigma Framework (MISF). The MISF was designed to help bring uniformity and clarity to the construct of mental illness stigma construct in the vast body of research literature (Fox et al., 2018). The framework examines the perspectives of both the stigmatizer and the stigmatized, which are applicable for this proposed study that includes stigma experienced and expressed by nurses. In the model, intersectional characteristics are also utilized to better understand stigma and its components, which are stereotypes, discrimination, and prejudice. Other concepts identified in the model are perceived stigma, internalized stigma, anticipated stigma, and experienced stigma. Outcomes of interest are social rejection and public policy support. In the proposed study, the framework has been modified to incorporate associative stigma as one of the concepts under the perspective of the

stigmatized with outcomes being occupational burnout and its concepts. The dependent variable is stigma while the independent variables include sociodemographic factors, acculturation, associative stigma, and occupational burnout. For the purposes of this study, the *APA Dictionary of Psychology* has defined the terms 'acculturation' and 'stigma' as follows:

> Acculturation: the processes by which groups or individuals adjust the social and cultural values, ideas, beliefs, and behavioral patterns of their culture of origin to those of a different culture. Psychological acculturation is an individual's attitudinal and behavioral adjustment of another culture, which typically varies with regard to degree or type.
>
> Stigma: the negative social attitude attached to a characteristic of an individual that may be regarded as a mental, physical, or social deficiency. A stigma implies social disapproval and can lead unfairly to discrimination against and exclusion of the individual. (APA, 2018)

Methodology

This study used a quantitative cross-sectional design to investigate relationships between demographic characteristics of U.S.-based African immigrant nurses and stigma towards individuals with mental illness, examined the relationship between stigma and associative stigma among African immigrant nurses, and finally, explored relationships between associative stigma and occupational burnout.

Setting: The study setting was psychiatric, and outpatient and inpatient hospital settings in the United States.

Sample Size: Seventy-three African immigrant nurses were recruited for this study based on a power calculation.

Recruitment: Participants were recruited through social media platforms such as Facebook, Twitter, LinkedIn, and Instagram. Participants were also recruited via snowball sampling.

Inclusion Criteria: African-born nurse practitioners and registered nurses were eligible for inclusion in the study. Other requirements for inclusion were currently working as a nurse with at least 1-year experience, and exposure to patients with mental illness at any time during practice.

Compensation for Participant Time: Participants had the opportunity to enroll in a raffle draw. Two winners were selected randomly for chances of winning an iPad each.

Data Collection

The study measures described above (OMS-HC, BIQ, CASS, CBI) instruments were administered via a web-based survey.

Statistical Analysis

The IBM-SPSS version 20 was used to analyze quantitative data. The collected data was transferred from Qualtrics to SPSS. The independent variables were the participants' sociodemographic characteristics being age, gender, years of experience, time of migration, years since migration, and degree of acculturation. Multiple linear regression models, *t*-tests and ANOVA were used to determine associations between variables.

Structure of the Dissertation

Chapter 2 explored and synthesized research on stigma beliefs and perceptions of mental illness among healthcare professionals in Africa and other developing countries through an integrative literature review. Chapter 3 examined the relationship between the demographic characteristics of African immigrant nurses based in the United States and stigma towards people

with mental illness. This chapter also investigated whether there was an association between stigma towards people with mental illness and associative stigma experienced by African immigrant nurses using the OMS-HC, the Modified BIQ (M-BIQ) Scale, and the CASS. Chapter 4 measured stigma of people with mental illness, occupational burnout, and associative stigma experienced by the nurses using the OMS-HC, CBI Scale, and CASS, respectively. Associations between stigma of people with mental illness, associative stigma, occupational burnout were analyzed.

Overall, these articles provided baseline data about the population of interest, which could lead to future nurse-driven interventions to reduce or eliminate stigma toward patients and associative stigma of providers, improve the quality of care provided to people with mental illness, and reduce occupational burnout among African immigrant nurses.

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Chapter 2: Manuscript One – An Integrative Review of Stigmatization of Mental Illness Among Healthcare Providers in Africa and Other Developing Regions

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Abstract

Stigmatization of people with mental illness has been prevalent in developing African settings. Major drivers of societal attitudes toward people with mental illness—in African countries especially—include traditional cultural or religious beliefs about mental illness and prejudices. Inhabitants of African countries, including health professionals, have tended to hold a deeply entrenched stigma toward mental illness; however, little is known about mental illness stigma among African nurses who immigrate. This integrative review aimed to synthesize research on stigma directed toward individuals with mental illness among African immigrant nurses in the United States, and how acculturation of African immigrant nurses to U.S. culture affects stigma. This literature review used a systematic strategy to search PubMed, PsycINFO, and CINAHL. The inclusion criteria were: An article had to meet the inclusion criteria to be included in the study. The inclusion criteria were: (a) describing a study conducted in Africa or other comparable low-income countries; (b) focusing on health care providers, with nurses among the participants; and (c) focusing on mental health stigmatization or stigma; (d) peer reviewed. Overall, 19 articles were included for this systematic review. Findings revealed that there is widespread stigmatizing and discriminating behaviors directed toward people with mental illness

by African healthcare providers, including nurses. Also, African healthcare providers hold deeply entrenched supernatural beliefs about mental illness causation. Stigmatization of mental illness has deleterious consequences on the quality of care provided by healthcare providers. This review supports the need to examine stigma among African immigrant nurses based in the US, which has not received adequate study.

Keywords: Stigma, mental illness, mental disorder, nurses, healthcare provider, Africa, Africans, perceptions, stigmatization, healthcare professional, and African healthcare providers.

An Integrative Review of Stigmatization of Mental Illness Among Healthcare Providers in Africa and Other Developing Regions

Stigmatization of people with mental illness is highly prevalent in developing African settings (Ubaka et al., 2018). Major drivers of societal attitudes toward people with mental illness— especially in African countries—include cultural, spiritual, or religious beliefs about the origin of mental illness and prejudices (Egbe, 2015). A study in Nigeria found that 96% of a large community sample considered individuals with mental illness to be dangerous (Stefanovics et al., 2016). Another study conducted in South Africa on the experiences and consequences of psychiatric stigma suggested minimal societal empathy or compassion toward individuals with mental illness (Egbe, 2015). In the same vein, the authors of another study conducted in Kenya reported that mental illness stigma was highly prevalent in sub-Saharan Africa (Mutiso et al., 2017). Inhabitants of sub-Saharan African countries, including health professionals, have tended to hold a deeply entrenched stigma toward mental illness (Stefanovics et al., 2016; Ubaka et al., 2018). For example, Ubaka et al. (2018) reported that 70.6% of a sample of health professionals consisting of doctors, pharmacists, and nurses strongly agreed that individuals with mental illness have a characteristic that makes it simple to distinguish them from healthy individuals, 52% strongly agreed that people with mental illnesses require the same level of discipline and control as young children, and 55.1% strongly agreed that a person should be admitted to the hospital as soon as he or she exhibits signs of a mental disturbance. In addition, 33.2% of the health professionals endorsed a lack of self-discipline and willpower as being among the main causes of mental illness (Ubaka et al., 2018). According to Kapungwe et al. (2011), more primary care providers strongly agreed (28.8%) than strongly disagreed (16.2%) that people with mental illness should not be allowed to work. In addition, 75.6% agreed that no one should be

around people with mental illness, even after they have been treated; 74.7% said those with mental illness should not have children; and 42% endorsed asking to be excused from treating those with mental illness (Kapungwe et al., 2011).

Healthcare providers may hold stigmatizing beliefs regarding people with mental illness (Stefanovics et al., 2016). Stigmatization of persons with mental illness among healthcare providers has had negative consequences that have sometimes been degrading and life-threatening (Mukherjee & Mukhopadhyay, 2018; Ubaka et al., 2018). Individuals with mental illness have been marginalized, discounted, and deprived of basic needs of life in the course of seeking healthcare, which may put them at high risk of self-neglect and suicide (Mukherjee & Mukhopadhyay, 2018; Ubaka et al., 2018). Some have been reluctant to seek needed care and treatment, have experienced impaired access to employment, and have experienced adverse effects on housing and social relationships (Mukherjee & Mukhopadhyay, 2018; Ubaka et al., 2018).

According to Rössler (2016), prejudice, discrimination, and stereotypes are ways that stigma shows up in cognition, emotion, and behavior. According to Stefanovics et al. (2016), stereotypes are preconceived notions or ideas about specific groups of people. Referring to people with mental illnesses as violent, unpredictable, hazardous, indolent, weak-willed, or untrustworthy is an example of stereotyping. An emotional attitude of prejudgment or support for a stereotype is called prejudice. Rather than seeing mental illness as a medical disease, people often define those who suffer from it by their illness. As an illustration, some people could call someone “a schizophrenic” as opposed to “a person with schizophrenia.” When people respond based on their beliefs and attitudes, stereotypes and prejudice frequently result in behavioral responses (Rössler, 2016).

Stigma is an ignominious perception of an individual that reduces the totality of that individual to the status of a lesser, imperfect, and disregarded human being (Bonsu & Yendork, 2018). Reluctance to associate with people with mental illness emerges from perceptions of mental illness and stereotypes about those with mental illness (Bonsu & Yendork, 2018). In most African communities, perceptions of mental illness arise from beliefs that mental disorders are the result of supernatural influences, such as demon possession, consequences of wrongdoing, witchcraft, or hatred by a family member or acquaintance (Mosaku & Wallymahmed, 2017). Other common beliefs are that mentally ill individuals are unfortunate, unpredictable, prone to violence, and incapable of cure, which leads to a belief in the segregation of such individuals (Mosaku & Wallymahmed, 2017). Healthcare professionals, who are custodians of care and should be more knowledgeable about mental illness than the general public, share the same cultural beliefs or even have more negative beliefs (Rössler, 2016). In cases where healthcare professionals, such as psychiatrists, have expressed positive attitudes toward individuals with mental illness, others have exhibited reduced willingness to have social contact or social interaction with those professionals (Rössler, 2016).

Self-stigmatization among those with mental illness also has adverse effects, such as low self-esteem, even when symptoms are well-controlled (Stefanovics et al., 2016). The negative effects of stigma extend beyond stigmatized individuals to their family members, coworkers, caregivers, and mental health professionals, who may also experience stigma by association from others in society and the media (Mukherjee & Mukhopadhyay, 2018; Picco et al., 2019; Ubaka et al., 2018). This phenomenon—associative stigma—has negative outcomes for healthcare professionals and may manifest as persistent cynicism and reduced quality of care (Mantzorou et al., 2020).

Aim

Researchers have identified stigma directed toward individuals with mental illness among Africans and African healthcare providers (Ubaka et al., 2018). However, there is limited understanding of how stigmatization among healthcare providers and the patients they care for may result in a higher risk of negative stigma-related outcomes, such as poor quality of care, exacerbation of mental illness stigma, and occupational burnout (Picco et al., 2019). There is also limited research integrated across countries. The purpose of this integrative literature review was to synthesize research on stigma directed toward individuals with mental illness among healthcare providers from Africa and other comparable developing countries.

Methods

Literature Search Strategy

The systematic search strategy used for this literature review utilized PubMed, PsycINFO, and CINAHL databases between April, 2021, and December, 2022. I followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) criteria for reporting systematic reviews (Page et al., 2021). As an integrative review of an unexplored topic, no separate study protocol was published.

Results were filtered to include peer reviewed articles and articles written in English. Keywords and medical subject heading terms used were ‘stigma,’ ‘mental illness,’ ‘mental disorder,’ ‘nurses,’ ‘healthcare provider,’ ‘Africa,’ ‘Africans,’ ‘developing countries,’ ‘perceptions,’ ‘stigmatization,’ ‘healthcare professional,’ and ‘African healthcare providers.’ To be included, an article had to meet the following inclusion criteria: (a) describing a study conducted in Africa or other comparable low-income countries; (b) focusing on healthcare providers, with nurses among the participants; (c) focusing on mental health stigmatization or

stigma; and (d) peer reviewed. Although I aimed to focus on studies of African providers and sought to include as many studies as possible from African countries, due to a paucity of literature on this topic, studies from other comparable developing countries were included. Studies were excluded if they involved stigma towards persons with illnesses other than psychiatric conditions or were unrelated to the review topic.

The initial search yielded a total of 487 articles. Of these, 434 were from PubMed, 43 were from PsycINFO, and 10 were from CINAHL. Then, 336 articles were removed when exclusion criteria were applied, to the effect that that the articles were required to be peer-reviewed and written in English. One hundred and fifty-one articles remained; I reviewed the titles and abstracts to further identify whether they qualified for inclusion. At this stage I excluded 71 articles that involved studies of HIV, studies with African American participants, or studies that did not include nurses. The remaining articles (80) were reviewed in more detail, and an additional 61 articles were excluded due to not meeting inclusion criteria upon further review. Ultimately, 19 articles met inclusion criteria for review and integration.

I used a table of evidence to organize findings from selected studies (see Appendix B). I extracted information from each article about the study design, purpose, sample, setting, results, and interpretation, including strengths/limitations. Then, I reviewed the results and interpretation data to identify the most frequently occurring patterns, and findings of the greatest magnitude and significance. Similar findings were grouped together to identify a common thematic meaning. I identified three themes across the selected studies.

Results

Overall, 19 articles were selected and reviewed for this integrative literature review (see the PRISMA Diagram in Appendix A). Thirteen of the articles returned were studies of stigma

related to mental illness from multiple African countries, including six related to West Africa (Nigeria and Ghana), two to East Africa (Kenya), two to Central Africa (Equatorial Guinea), one to North Africa (Sudan), and one to Southern Africa (Zambia). The 13th article described a study comparing stigma regarding mental illness in Nigeria, Ghana, the United States, Brazil, and China. The other six articles were from other developing countries: two from China, two from India, one from Pakistan, and one from Indonesia.

Description of Articles

Table 1 characterizes the basic features of the 19 included articles (Adewuya et al., 2017; Adjorlolo et al., 2018; Ali & Agyapong, 2016; Audu et al., 2013; Gandhi et al., 2019; Hartini et al., 2018; Kapungwe et al., 2011; Kpobi & Swartz, 2019; Ma et al., 2018; Makanjuola et al., 2016; Mantzorou et al., 2020; Mosaku & Wallymahmed, 2017; Musyimi et al., 2016; Mutiso et al., 2017; Nisar et al., 2019; Reuter et al., 2016; Stefanovics et al., 2016; Ubaka et al., 2018). All studies were published from 2011–2020. Fourteen were cross-sectional studies, of which 19 adopted convenience sampling. Only one study used random selection of subjects. Eighteen studies took place in developing countries. Of these, 12 took place in Africa (Nigeria, Ghana, Kenya, Equatorial Guinea, Zambia, and Sudan). The remaining six took place in Asia (India, China, Pakistan, and Indonesia). One study stood out because it involved research in five countries (Nigeria, Ghana, the United States, Brazil, and China). The studies' sample sizes ranged from 30–1,697 participants.

Study Quality Assessment

I used the Johns Hopkins Nursing Evidence-Based Practice Model (JHNEBP) to assess the quality of selected articles. Table 1 describes the variation in the characteristics of the articles reviewed: 73% of the studies reviewed had quantitative designs, 16% had qualitative designs,

and the remaining 11% relied on mixed methods. Table 2 presents the quality ratings of these articles. In total, there were eight low-quality articles (42.1%), nine moderate quality articles (47.4%), and two-high quality articles (10.5%). Six articles (31.6%) did not identify their limitations. The studies were either qualitative or quantitative nonexperimental research, categorized as Level 3 research evidence according to the JHNEBP.

High response rates, use of standardized instruments, high reliability and validity, well-documented data collection procedures, well-reported results and conclusions, identification of limitations, and observation of ethical standards were strengths of the studies reviewed. Sample sizes were appropriate among the quantitative studies, ranging in size from 103–1,697 participants. The instruments used varied from study to study; however, 80% of the reviewed studies involved the use of standardized instruments with moderate/good Cronbach's alpha values of at least 0.70, indicating good internal consistency. Ma et al. (2018) used a self-developed unstandardized instrument and provided no Cronbach's alpha values. Studies commonly excluded individuals with lack of contact with mentally ill people, which was a strength as it allowed for review of studies with experienced providers. Response rate was high in most studies (83.3%–100%) in almost all the studies, except for one of the quantitative studies by Ubaka et al. (2018), which was 44.9%.

The major weaknesses observed were the use of cross-sectional surveys and nonrandomized sampling. Most of the quantitative research studies relied on self-administered instruments and cross-sectional designs, which could have increased the potential for response bias because respondents may have answered questions based on their relationships with researchers or what they felt their responses should be, rather their actual views. Among the three qualitative studies, there was no mention of data saturation or details of verification with

experts (Ali & Agyapong, 2016; Kpobi & Swartz, 2019; Reuter et al., 2016). There was not sufficient standardization of participants or measures across studies for a meta-analysis. Almost two-thirds of the studies included healthcare providers and nurses as participants (52.6%), while others had nonhealthcare providers as participants, such as carers who were family members, traditional and faith healers, health workers, and community health volunteers (42.1%). One of the articles had primary care providers as participants and there was no mention of nurses (5.23%). The studies mostly relied on convenience sampling; this has a potential for selection bias, which reduces the strength of the studies' results.

Identified Themes

Three themes emerged from the reviewed literature: (a) stigma towards persons with mental illness among healthcare providers from developing countries, (b) cultural beliefs and stigma towards persons with mental illness, and (c) stigma towards persons with mental illness and quality of care.

Stigma Towards Persons with Mental Illness Among Healthcare Providers in Low-Income Countries

Studies found widespread stigmatizing and discriminating behaviors directed toward people with mental illness by African healthcare providers, including nurses (Adjorlolo et al., 2018; Kapungwe et al., 2011; Reuter et al., 2016; Stefanovics et al., 2016). For example, results from a study in Zambia indicated that 43.2% of the respondents either strongly agreed or agreed that all people with mental illness have weird behavior, while 36% endorsed the stereotype that people with mental illness are dangerous (Kapungwe et al., 2011). Also, 55.8% endorsed that if anyone with mental illness who holds a political office is undergoing treatment, they should be suspended from office. Other discriminatory behaviors endorsed by the participants in the same

study were that people with mental illness should not be given employment (61.2%) or have children (74.7%) (Kapungwe et al., 2011). In another study in Northern Nigeria, a significant number of participants displayed stereotyping and discriminatory behaviors (Audu et al., 2013). For example, 83% indicated that they would not share their house or workplace with persons who have been treated for mental illness, 87.5% would not have them as leaders, and 87.7% would not consider them for marriage (Audu et al., 2013). In the same fashion, 70% verbalized that mentally ill persons were violent or aggressive, 76% called them dirty, while 44% felt they were a nuisance to society (Audu et al., 2013). This finding also emerged from studies of other low-income developing countries, such as China, India, and Pakistan (Gandhi et al., 2019; Ma et al., 2018; Mukherjee & Mukhopadhyay, 2018; Yang et al., 2019). Healthcare providers expressed stigma in the form of stereotyping, prejudice or judgmental attitudes, and discrimination through avoidance and social distancing (Fox et al., 2018; Stefanovics et al., 2016).

Across the literature, only two of the studies were considered to be of high quality, based on the JHNEBP. The majority (52.6%) were of moderate quality, where authors missed in indicating a conceptual framework in the quantitative studies or neglected to cite their studies' limitations, and the remaining seven (36.8%) were lacking both quality assessment properties. Regarding limitations, a consistent one across literature was the use of convenient or purposeful sampling for recruitment, and the use of self-report questionnaire in all the quantitative studies.

Instruments adapted for measuring stigma assessed a variety of variables, such as authoritarian patterns, a perception that people with mental illness are second-class citizens; benevolence, thereby viewing them with sympathy; social restrictiveness, a perception that they are dangerous and should be avoided or isolated; and community mental health ideology,

signifying whether the community should accept or reject mental health services among them (Gandhi et al., 2019; Ma et al., 2018; Mosaku & Wallymahmed, 2017; Stefanovics et al., 2016). Concerning authoritarian patterns, participants in some studies said that people with mental illness are easy to recognize (Mosaku & Wallymahmed, 2017). Participants also said people with mental illness are a burden on society and therefore should be avoided (Kapungwe et al., 2011; Mosaku & Wallymahmed, 2017; Ubaka et al., 2018). In the area of social restrictiveness, participants in some studies said individuals with mental illness posed a high risk to society and should therefore be isolated far away from others; they also indicated that a person would be foolish to marry anyone with a history of mental illness (Ali & Agyapong, 2016; Ubaka et al., 2018). Men expressed more stigmatizing attitudes than women (Ma et al., 2018). Another finding related to the association between experience and stigma. The more years of experience a nurse had, the more discriminating behaviors they displayed toward mentally ill people and that younger nurses showed more interest in learning than older nurses (Adjorlolo et al., 2018; Gandhi et al., 2019; Mosaku & Wallymahmed, 2017).

Cultural Beliefs and Stigma Towards Persons with Mental Illness

Several studies indicated that local culture played a significant role in forming attitudes toward mental illness (Stefanovics et al., 2016). Africans in general and healthcare professionals in African or other low-income countries in particular have tended to hold strongly entrenched supernatural beliefs regarding the causes of mental illness (Makanjuola et al., 2016; Stefanovics et al., 2016). These beliefs include that people with mental illness should receive care from traditional healers, herbalists, and religious leaders (Stefanovics et al., 2016). In Ali and Agyapong's (2016) study of the perceptions of psychiatrists and other providers of barriers to mental healthcare utilization in Sudan, psychiatrists indicated that people were usually more

comfortable taking their family members with mental illness to traditional healers than taking them to psychiatric hospitals. The underlying belief was that when others in their communities learned about psychiatric hospitalization, individuals and their family members would be labeled negatively. A mentally ill individual and their family could consequently be marginalized and unable to marry in their community (Ali & Agyapong, 2016).

The general belief in African and other low-income countries has been that the causes of mental illness are witchcraft, possession by evil spirits, curses or divine punishments, bad luck, destiny, and the will of God (Adewuya et al., 2017; Adjorlolo et al., 2018; Stefanovics et al., 2016). For example, in their study conducted in Nigeria, Musyimi et al. (2016) stated that approximately 10% of the population held the belief that mental illness is a divine retribution for transgressions committed by the individual or their forebears. Approximately 60% of respondents said the person should be kept in social isolation because they were under demonic possession. The same study also revealed that a sizable segment of participants (40%) thought that using psychoactive substances, particularly Indian hemp, was the cause of mental illness. It was also widely accepted that individuals who smoked Indian hemp were to blame for their poor health and should not be shown any compassion (Musyimi et al., 2016).

Similar beliefs in supernatural causes of mental illness have been observed among Bedouin Arabs, Algerians, Haitians, and Indians (Makanjuola et al., 2016). In cross-sectional research in Pakistan with 400 participants, 59.5% of participants believed care of depression consisted of talking to someone trustworthy, 56.5% believed care consisted of praying to God, and 52.3% believed psychiatrists should provide treatment (Nisar et al., 2019). Some Pakistanis believed that mental illness was caused by black magic, ‘the evil eye,’ demon possession, and God’s punishment (Nisar et al., 2019).

Another widespread belief in low- to middle-income countries has been that individuals with mental illness are violent, unpredictable, should be avoided, and cannot be cured (Mosaku & Wallymahmed, 2017; Musyimi et al., 2016). In these countries, people have tended to trust traditional and religious healers more than healthcare providers (Ali & Agyapong, 2016; Kpobi & Swartz, 2019; Musyimi et al., 2016).

Stigma Towards Persons with Mental Illness and Quality of Care

Stigmatization of people with mental illness may have consequences for the quality of life, access to care, and quality of care offered by healthcare providers (Ubaka et al., 2018, Adjorlolo et al., 2018; Kapungwe et al., 2011; Reuter et al., 2016). Stigma among healthcare providers promotes discrimination and impacts their readiness to provide quality treatment (Ubaka et al., 2018). In African countries, where people have trusted herbalists and faith healers for care, the local and faith-based models used to diagnose and care for those with mental illness have had implications for their well-being, as these methods may not be standardized, not hygienic, or lack sufficient empirical backing (Kpobi & Swartz, 2019). Herbalists have been found to display and justify deeply ingrained stigma, similar to other types of healthcare professionals and the public (Kpobi & Swartz, 2019).

Discussion

This systematic review explored stigma towards individuals with mental illness among African healthcare providers and providers in other developing nations. The findings revealed that stigma towards people with mental illness is prevalent in African countries and other low-income developing countries. This is partly due to deeply entrenched cultural beliefs about causation of mental illness, which has consequences for quality of care and recovery. Mental illness stigma may negatively affect patients in low-income countries; however, there is limited

research on this topic, and little is known. Advancing our understanding of how much stigma this subgroup displays toward people with mental illness calls for the attention of researchers and those with an interest in public health. There is a lack of public health research on the issue of mental health stigma that considers cultural beliefs and their effect on patients and providers. There has been a high treatment gap, up to 70%–90%, relating to mental illness in low- and middle-income countries (Gandhi et al., 2019; Musyimi et al., 2016). Mentally ill people in these countries have experienced not only poverty, unemployment, and economic loss but also the consequences of the stigmatizing attitudes of their providers (Musyimi et al., 2016). These consequences include lack of access to needed care, which has increased the burden on those with mental illness through avoidance, social rejection, unemployment, low self-esteem, lack of housing, and low quality of life. In such circumstances, achieving full recovery to a normal life is challenging.

Limitations

Authors who adopted quantitative methodology mostly used self-report cross-sectional surveys to collect data, which did not allow for assessment of stigma over time. Self-report data are susceptible to reliability and validity issues. According to Knaak et al. (2017), attitudes do not always predict behavior; such data collection, therefore, makes it difficult to conclude the stigmatizing behaviors of nurses. Most studies occurred in a single location, such as a single state or district, and thus may not be generalizable. Some of the quantitative studies relied on convenience sampling rather than randomized sampling; this negatively impacted validity. Among the qualitative studies, lack of information about content analyses, such as recruitment of independent experts for further analysis, and failure to verify transcribed data with participants limited the findings. The use of convenience sampling and snowball sampling rather than

purposive sampling was a limitation. Some authors did not carry out independent analyses before reaching conclusions. This also reduced the strength of the findings.

Strengths and Limitations of Review

There are strengths and limitations to this integrative review. Strengths included use of a systematic strategy, use of multiple databases across health science disciplines, use of a quality assessment tool, and capture of research on an understudied topic that integrated research across multiple countries. Limitations of the review included only reviewing articles published in English, use of only a single reviewer to apply inclusion/exclusion criteria, and inability to quantify findings across studies due to differences in methods. It is both a strength and a limitation that this review integrated studies across multiple countries, as there are likely local cultural differences that would be ideal to review individually.

Implications for Nursing Science, Practice, and Policy

The findings revealed that stigma towards people with mental illness is prevalent in African countries and that the consequences have deleterious effects on the quality of care received by these people, their quality of life and rehabilitation, and could potentially be life-threatening. There is a significant number of African immigrant nurses in the mental health settings; however, this population has not been studied. Existing literature indicates little, or nothing is known about stigma among African immigrant nurses based in the United States. It is therefore important to examine their levels of stigma towards people with mental illness. These concerns, which emerged from the findings, also have implications for further research and policy (Fox et al., 2018). Reducing stigma may substantially change the quality of care received by individuals with mental illness (Ubaka et al., 2018). Changes in orientation models used for new employees—through the inclusion of culture and acculturation assessments and cultural

competency education and awareness—may boost staff motivation and enhance the quality of care provided. Reducing burnout could involve the design of new programs for lifelong learning based on changing stigmatizing negative cognitive and emotional attitudes of professionals toward mentally ill individuals. Establishing public health policy support would enhance the reintegration of those with mental illness into society and allow more Americans to live quality lives and attain their potential. Most importantly, data from this study have the potential to add to knowledge on the stigmatization of mental illness and form a baseline that could act as a springboard for further studies.

Conclusion

This review supported the need to examine stigma among African immigrant nurses based in the United States, which has not received adequate study heretofore. Evidence from studies conducted in Africa and other low-income developing countries overwhelmingly supported the conclusion that stigmatization of individuals with mental illness has been a longstanding obstacle to the recovery and rehabilitation of those with mental illness. Because the best understanding of stigma requires consideration of intersectionality characteristics such as culture and beliefs, a need has emerged for policy to address these dangerous social constructs (Fox et al., 2018). Healthcare organizations should also disseminate and respect policies to reduce stigma and its damaging consequences.

Tables

Table 1

Summary of Articles

Article characteristic	*N*	%
Research design		
Quantitative cross-sectional	14	73
Qualitative	3	16
Mixed methods	2	11
Participants		
Psychiatrists	2	11
Physicians	7	37
Psychologists	7	37
Nurses	7	37
Medical assistants	1	5.5
Mental health workers	3	16
Primary healthcare providers	2	11
Psychologists, pharmacists, physiotherapists, case managers, medical social workers	2	11
Traditional healers	3	16
Public	2	11
Research setting		
Tertiary psychiatric hospital	4	20
Institute of mental health	2	8
General hospital (primary care)		20
Urban and rural communities	3	24
Traditional psychiatric hospital	4	22

Table 2

Article Ratings and Corresponding Evidence

Article	N	Location	Purpose and RQ [a]	Conceptual model [b]	Procedure [c]	Instruments [d]	Analysis [e]	Results/ discussions [a]	Limitations [b]	Rating
Adewuya et al. (2017)	607	Nigeria	Yes	No	Yes	No	Yes	Yes	Yes	Low
Adjorlolo et al. (2018)	113	Ghana	Yes	No	Yes	Yes	Yes	Yes	Yes	Moderate
Ali and Agyapong (2016)	103	Sudan	Yes	No	Yes	N/A	Yes	Yes	Yes	Moderate
Audu et al. (2013)	325	Nigeria	Yes	No	Yes	Yes	Yes	Yes	Yes	Moderate
Hartini et al. (2018)	1269	Indonesia	Yes	No	Yes	Yes	Yes	Yes	Yes	N/A
Stefanovics et al. (2016)	906	U.S. Nigeria Ghana Brazil China	Yes	No	Yes	Yes	Yes	Yes	Yes	Moderate
Kapungwe et al. (2011)	111	Zambia	Yes	No	Yes	No	Yes	Yes	No	Low
Kpobi et al. (2019)	8	Accra, Ghana	Yes	N/A	Yes	No	Yes	Yes	Yes	High
Makanjuola et al. (2016)		Nigeria Ghana Kenya	Yes	Yes	Yes	Yes	Yes	Yes	Yes	High
Ma et al. (2018)	316	China	Yes	No	Yes	Yes	Yes	Yes	No	Low

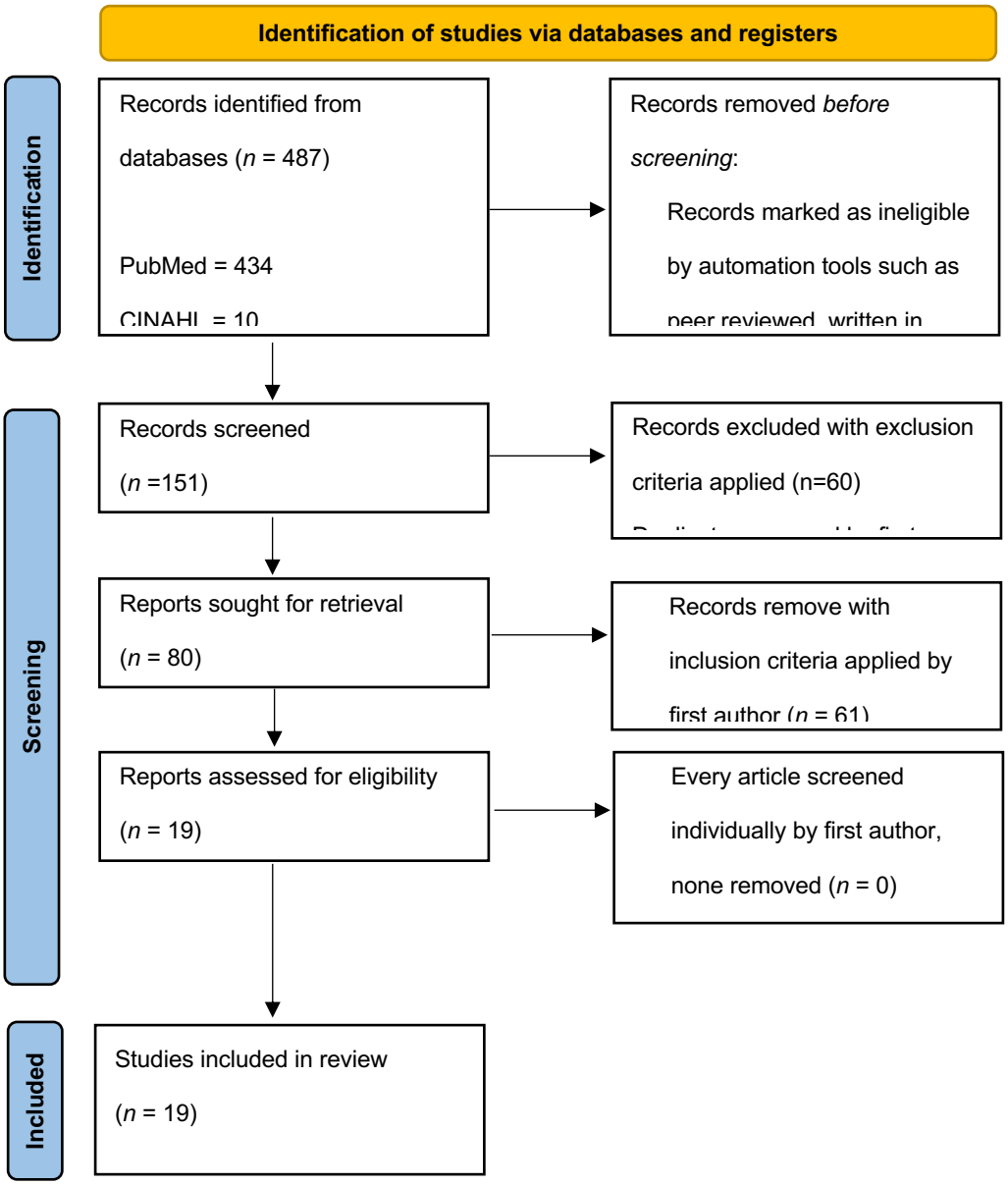
Article	N	Location	Purpose and RQ [a]	Conceptual model [b]	Procedure [c]	Instruments [d]	Analysis [e]	Results/ discussions [a]	Limitations [b]	Rating
Mosaku and Wallymahmed (2017)	100	Nigeria	Yes	No	Yes	Yes	Yes	Yes	Yes	Moderate
Musyimi et al. (2016)	18	Kenya	Yes	No	Yes	Yes	Yes	Yes	No	Low
Mutiso et al. (2017)	104	Kenya	Yes	No	Yes	Yes	Yes	Yes	Yes	Moderate
Reuter et al. (2016)	9	Equatorial Guinea	Yes	N/A	Yes	N/A	No	Yes	Yes	Low
Ubaka et al. (2018)	305	Eastern Nigeria	Yes	No	Yes	No	Yes	Yes	No	Low
Nisar et al. (2019)	385	Karachi, Pakistan	Yes	No	Yes	No	Yes	Yes	No	Low
Gandhi et al. (2019)	126	Karnataka, India	Yes	No	Yes	Yes	Yes	Yes	Yes	Moderate
Yang et al. (2019)	1,697	Wuhan, China	Yes	No	Yes	Yes	Yes	Yes	Yes	Moderate
Mukherjee and Mukhopadhyay (2018)	196	Bengal, India	Yes	No	Yes	Yes	Yes	Yes	No	Low

Note. A blank cell indicates a category is not applicable to a source. RQ = research question; U.S. = United States.

[a] Clearly stated. [b] Identified. [c] Described and reproducible. [d] Standardized, reliable, and valid. [e] Describes statistical tests conducted and software used or thematic analysis.

Appendix A

Preferred Reporting Items for Systematic Reviews and Meta-Analyses Flow Diagram



Appendix B

Table of Evidence

Citation	Purpose	Sample/Setting	Methods (design, interventions, measures	Results	Discussion, interpretation, limitation of findings
Adewuya et al. (2017).	To evaluate the knowledge, perceived challenges, and attitude of PHC workers in Lagos regarding depression and its management in the PHC.	Health workers (n=607) from 49 "flagship" PHCs in Lagos.	Design: Cross-sectional study. Measures: Self-report questionnaire assessing sociodemographic information, experience, training, diagnosis of depression, perceived causative factors, experience, perceived challenges, roles in case management, and social distance towards depression.	56.2% correctly diagnosed depression. Top causative factors: psycho-social (77.3%), spiritual (36.2%). Only 39.4% agreed that depressed patients are best managed in a PHC, but 86.2% would support treating such patients in their PHC if capacity is enhanced. Top challenges: heavy work schedule (68.5%), lack of staff competence (67.5%). Over 42% had a poor attitude towards depressed patients. Mental health training was the major predictor of good knowledge (OR 4.52, 95% CI 2.96-7.00) and good attitude (OR 2.17, 95% CI 1.48-3.17).	The study provided insights into the knowledge, challenges, and attitudes of PHC workers regarding depression management in Lagos. Limited mental health training and capacity building in PHCs pose challenges to depression management. Heavy work schedules in PHCs present challenges to integrating mental health services into primary care. A significant proportion of health workers exhibit stigmatizing attitudes towards depressed patients, particularly those without mental health training. Strengths: Utilized a large sample size and validated measures, obtained necessary ethical approvals, and covered a comprehensive range of

Citation	Purpose	Sample/Setting	Methods (design, interventions, measures	Results	Discussion, interpretation, limitation of findings
					factors related to depression. Weaknesses: Relied on self-report measures which may be subject to bias, limited generalizability beyond Lagos, Nigeria, and potential influence of cultural factors on participant responses.
Adjorlolo et al. (2018).	To investigate mental health nurses' attitudes toward offenders with mental illness in Ghana.	Participants were 113 registered mental health nurses recruited from two public mental health institutions in Ghana: Accra Psychiatric Hospital (n = 54) and Pantang Mental Hospital (n = 59). These hospitals were chosen due to their accessibility and large number of offenders with mental illness as patients.	Methods: Cross-sectional survey using self-report questionnaires. Design: Measures: Insanity Defense Attitude–Revised (IDA-R), Community Attitude Toward Mental Illness (CAMI) questionnaire, Legal Authoritarianism (conviction proneness), Punitiveness Scale (punitive attitudes).	Mental health nurses who practiced for 6 years and above were more unsympathetic towards offenders with mental illness (21%). Male nurses aged 30 years and above were more likely to hold offenders strictly liable for their offenses (25%). Scores in conviction proneness and criminal blameworthiness significantly predicted negative attitudes toward offenders, even after controlling for attitudes toward mental illness.	The findings suggested that mental health nurses' attitudes toward offenders with mental illness may be influenced by factors such as years of practice and age. Strengths: Utilized validated measures to assess attitudes, obtained a reasonable response rate (68%), and controlled for attitudes toward mental illness in analyzing results. Weaknesses: Relied on self-report measures which may be subject to bias, limited generalizability due to small sample size and specific hospital settings, and potential influence of chosen

Citation	Purpose	Sample/Setting	Methods (design, interventions, measures	Results	Discussion, interpretation, limitation of findings
					vignette on participant responses.
Ali and Agyapong (2016).	To identify barriers to mental health services utilization in Sudan from the perspectives of carers of mentally ill patients and psychiatrists, and to make recommendations to address these barriers.	Sample size = 115 The study was conducted in Khartoum, Sudan, specifically at Tijani Elmahi Psychiatric Hospital for carers and with psychiatric consultants from Abdalal Alidrisi psychiatric hospital in Khartoum Bahri.	A cross-sectional survey of carers of mentally ill patients and qualitative interviews with psychiatric consultants were conducted. The Health Belief Model was used as a conceptual framework to guide the study. No specific interventions were mentioned.	Barriers to mental health services utilization identified by carers included beliefs around mental illness, resorting to alternative treatments, centralization of mental health services, inadequate number of mental health staff, and mental health not being a priority by policy makers. Psychiatrists identified additional barriers such as stigma, cost of medications, and worries about medication's side effects. Recommendations were proposed to address these barriers.	The study findings suggested that patients face various barriers to accessing mental health services in Sudan, including physical, attitudinal, and systemic factors. These barriers align with the Health Belief Model and highlight the need for targeted interventions to improve mental health services utilization. Limitations include the exclusion of mental health patients themselves from the study and the use of a non-validated questionnaire.
Audu et al. (2013).	To examine the stigmatization of people with mental illness within a rural community and identify the sociodemographic variables involved.	Malali village, Kaduna North local government area, Kaduna state, Nigeria; 325 adult inhabitants.	Cross-sectional descriptive study using multi-stage random sampling; interviewer-administered questionnaire.	Only 0.9% of respondents attributed mental illness to brain disease; other attributions included spiritual attack, punishment for evil doing, and illicit substance use. Negative views and discriminatory practices were prevalent.	Stigmatization of people with mental illness remains widespread in the community; need for public education about causes, transmission, and treatment options highlighted. Limitations included lack of specific disorder attitudes assessment and potential influence of

Citation	Purpose	Sample/Setting	Methods (design, interventions, measures	Results	Discussion, interpretation, limitation of findings
					cultural norms on self-reporting.
Gandhi et al. (2019).	To assess nurses' knowledge and perceptions towards mental illness.	Cross-sectional descriptive study among 126 nurses under the District Mental Health program in Karnataka, India.	Data collected via self-reported questionnaires, including modified versions of the Public Perception of Mental Illness questionnaire and the Attitude Scale for Mental Illness.	Majority of subjects were women (74.4%) and Hindus (92.1%), with 91% demonstrating adequate knowledge. 52% held negative attitudes towards people with mental illness. Women endorsed more positive attitudes in several domains.	Adequate knowledge about mental illness among nurses but also highlighted stigmatizing and negative attitudes. Urgent need for educational programs promoting positive attitudes towards people with mental illness.
Hartini et al. (2018).	To assess the relationship between mental health knowledge and stigma towards mental illness in a community setting in Indonesia.	Survey study conducted on 1,269 respondents in East Java, where the prevalence of severe mental disorder is 2.2‰.	Survey research with respondents aged 10-75 in East Java. Instruments: CAMI, MAKS, sociodemographic questionnaire.	Better mental health knowledge associated with lower stigma. Significant differences in stigma across various demographic factors.	Antistigma interventions should consider sociodemographic factors and use psychosocial approaches to improve literacy and contact with mental health patients. Limitations included the use of translated scales and self-report measures.
Ighodaro et al. (2014).	To compare beliefs about medication effectiveness and attitudes towards people with mental illness among Nigerian medical personnel at different levels of training and experience.	Sample: Convenience samples of medical students at different levels of training (pre-clinical and clinical psychiatry rotation) and graduate primary care physicians in the Ibadan community.	A structured, self-administered questionnaire was distributed to assess beliefs about medication effectiveness, attitudes towards people with mental illness, and sociodemographic characteristics. Factor analysis and ANCOVA	Medical students who completed a psychiatry rotation had significantly higher scores on attitudes towards socializing with people with mental illness, non-superstitious beliefs about the causes of mental illness, and belief in the role of	Clinical experience appears to have had a more significant impact on attitudes towards people with mental illness compared to didactic training alone. Direct exposure to patients with mental illness during clinical rotations may reduce

Citation	Purpose	Sample/Setting	Methods (design, interventions, measures	Results	Discussion, interpretation, limitation of findings
			were used to compare attitudes among the groups.	trauma and abuse compared to those without clinical psychiatric training. Graduate physicians also scored higher on socializing attitudes and belief in the role of trauma and abuse compared to medical students without psychiatric training. However, there was no significant difference in attitudes towards witchcraft and mental illness between groups.	stigma and promote more progressive attitudes among medical trainees and professionals. Limitations included the limited sample population and potential biases inherent in self-reported data. Further research is needed to explore the influence of clinical training on attitudes towards mental illness in larger and more diverse populations. The study's findings also suggest the importance of public education involving exposure to people living with mental illness, with guidance from experienced professionals, to address stigma against mental illness in Nigeria and other developing countries.
Kapungwe et al. (2011).	To explore healthcare providers' attitudes towards people with mental illness in two districts in Zambia.	Data collected from a total of 111 respondents from health facilities.	Using a pilot-tested structured questionnaire, attitudes of primary healthcare providers were assessed.	Widespread stigmatizing and discriminatory attitudes towards mental illness among primary healthcare providers were found. These findings confirmed similar studies	The study emphasized the urgent need for effective awareness-raising, training, and education programs among healthcare providers. Limitations included the focus on specific

Citation	Purpose	Sample/Setting	Methods (design, interventions, measures	Results	Discussion, interpretation, limitation of findings
				challenging the notion of less severe stigma in African countries.	districts and potential biases in self-report surveys.
Kpobi & Swartz (2019).	To explore the explanatory models (EMs) of intellectual disability held by traditional/faith healers in Ghana.	The study was conducted in the Greater Accra Region of Ghana. Participants included 36 traditional/faith healers, comprising herbalists, traditional medicine men, Muslim clerics/healers, and Pentecostal/charismatic Christian pastors/healers.	The study utilized a semi-structured interview format, conducted in English, Ga, or Twi, based on the participant's preference. A case vignette was used to facilitate discussions on intellectual disability. Interviews were audio-recorded, transcribed, and analyzed thematically.	The healers' explanatory models included beliefs about the nature, causes, course, and recommended treatment of intellectual disability. They attributed the condition to factors such as maternal negligence during pregnancy and spiritual causes, considering it a congenital, lifelong condition not curable by traditional methods.	The discussion highlighted the healers' views on intellectual disability, emphasizing their acknowledgment of its lifelong nature and their reluctance to use derogatory labels. The study also noted the potential for collaboration between traditional and biomedical approaches to intellectual disability care. Limitations included the relatively small sample size and the use of a case vignette, which may not fully reflect real-world scenarios.
Ma et al. (2018).	The study aimed to investigate attitudes towards mental illness among primary healthcare (PHC) providers in rural China, comparing attitudes between different mental health service models.	The sample consisted of 361 rural primary healthcare providers engaged in mental health service delivery in China.	A self-administered questionnaire was utilized to collect data on attitudes towards mental illness. The questionnaire included items assessing beliefs about mental illness, such as perceptions of violence and aggression among patients. Data were analyzed to	The results showed that the majority of rural primary healthcare providers held pessimistic and negative attitudes towards mental illness. High levels of agreement were found on subscales related to violence and aggression among mental illness patients. Correlations	Despite advancements, pessimistic attitudes persist among providers, impacting patient care. Strategies to address negative attitudes recommended, though further research is needed. Limitations: Self-reported attitudes may not fully reflect actual behavior

Citation	Purpose	Sample/Setting	Methods (design, interventions, measures	Results	Discussion, interpretation, limitation of findings
			determine the prevalence of negative attitudes and correlations between attitudes and provider abilities.	were observed between attitudes and provider abilities, suggesting an association between negative attitudes and poorer patient outcomes.	or clinical practice. Additionally, the study's focus on rural primary healthcare providers in China may limit generalizability
Makanjuola et al. (2016).	To explore explanatory models of causation of psychosis and assess internalized stigma among individuals seeking care from traditional or faith healers in sub-Saharan Africa.	The study included 24, 31, and 30 subjects from Ibadan (Nigeria), Kumasi (Ghana), and Nairobi (Kenya), respectively, who had recent experience utilizing the services of traditional or faith healers for severe mental disorders.	A mixed-method approach was employed, comprising key informant interviews to gather information on explanatory models of causation and questionnaire assessment of internalized stigma using an adapted version of the Scale for Internalized Stigma of Mental Illness.	Approximately 44%, 42.1%, 20.7%, and 37.5% of respondents from Nigeria, Ghana, and Kenya respectively reported high levels of self-stigma. The study found a correlation between high levels of self-stigma and endorsement of supernatural attribution for psychosis causation.	The study highlights the impact of explanatory models on self-stigma among individuals with psychosis in sub-Saharan Africa. Notably, a significant proportion of respondents with high self-stigma endorsed supernatural attributions. The findings underscore the complexity of addressing self-stigma and suggest the need for individualized interventions. The study's cross-sectional design precludes causal conclusions, and the small sample size may limit generalizability. Additionally, the recruitment of respondents from traditional healing facilities may introduce bias, and the applicability of Western-derived stigma

Citation	Purpose	Sample/Setting	Methods (design, interventions, measures	Results	Discussion, interpretation, limitation of findings
					scales to non-Western cultures warrants consideration.
Mosaku and Wallymahmed (2017).	To assess attitudes of primary healthcare workers towards mental illness.	Sample size: 120 workers. Osun state, Nigeria. Primary health centers	Cross-sectional survey. The CAMI scale was used.	Most primary healthcare workers (n = 120) hold a benevolent attitude towards the mentally ill. Experience of 10 years or more associated with less authoritarian (t = 3.19, p = 0.01) and less social restrictive (t = 3.90, p = 0.01) attitudes. No significant differences by gender, marital status, or designation.	Attitudes of primary healthcare workers similar to general population. Survey limitations include cross-sectional design, potential response bias, and limited scope.
Mukherjee and Mukhopadhyay (2018).	To assess the level of self-perceived stigma among caregivers of people with mental illness and identify associated factors.	200 caregivers of people with mental illness in the psychiatry outpatient department of a tertiary care hospital in West Bengal, India.	This cross-sectional study conducted structured interviews to collect data. Stigma and perception regarding mental illness were assessed using a validated 12-item Explanatory Model Interview Catalogue and a 20-item perception scale, respectively. Information on sociodemographic characteristics was also collected.	The average stigma score was 53.3 ± 13.2, indicating a higher-than-average level of perceived stigma among caregivers. Caregivers of higher age, female gender, low income, higher education, manual job, rural residence, and those who are single or widowed tended to score higher in the stigma scale. Female gender and rural residence were positively associated with stigma, while	The findings suggested that health-care providers should address caregivers' stigma to mitigate its impact on the course of illness and improve family life. Limitations may include potential biases inherent in cross-sectional studies and the specific context of the study setting, which may limit generalizability to other populations.

Citation	Purpose	Sample/Setting	Methods (design, interventions, measures	Results	Discussion, interpretation, limitation of findings
				perception score was negatively associated with stigma score.	
Musyimi et al. (2016).	Qualitative evidence on dialogue formation and collaboration	Rural Kenya, specifically Makueni County	Qualitative approach utilized. Nine Focus Group Discussions conducted with 8–10 participants each. Thematic content analysis and SPSS used for data analysis.	Four dominant themes identified: (1) basic understanding about mental illnesses, (2) interaction and treatment skills, (3) referral gaps and mistrust among practitioners, and (4) dialogue formation.	Basic understanding of mental illness among practitioners noted. Identification of referral gaps and mistrust crucial for collaboration. Training and mutual understanding key for bridging gaps. Limitation: Study conducted in specific region, may not be generalizable.
Mutiso et al. (2017).	Assessing stigma in health workers	Rural Kenya, Makueni County	Cross-sectional comparative survey conducted between December 2015 and March 2016. Sample of 104 participants (44 Health Workers (HWs), 60 Community Health Volunteers (CHVs) drawn from 20 primary health facilities.	Health Workers (HWs) had significantly higher mean mental health knowledge scores than CHVs ($p < 0.001$) and significantly higher mean positive attitudes scores ($p = 0.042$). Multiple regression models indicated positive attitudes as the only significant predictor of higher mental health knowledge.	Stigma-related mental health knowledge and attitudes are associated. Interventions should target both areas with health workers. Scope for intervention to increase knowledge and positive attitudes among those who feel a strong sense of community belonging. Future studies should test feasible ways to reduce stigma in this population. Limitations: Participants were recruited from a rural setting, limiting generalizability to urban

Citation	Purpose	Sample/Setting	Methods (design, interventions, measures	Results	Discussion, interpretation, limitation of findings
					populations. Possibility of selection bias and social desirability bias. Epilepsy was not included in the study, which may impact perceptions and attitudes toward mental illness. Further research is warranted to address these limitations.
Nisar et al. (2019).	Assessing attitudes towards depression	400 participants from Karachi, Pakistan	Cross-sectional study based on non-probability consecutive sampling. Questionnaire assessed perceptions of depression. Descriptive statistics and chi-square tests were used.	Majority perceived depression as sadness rather than a mental disorder. Causes cited: increased stress (72.2%), physical/emotional trauma (51.3%). Symptoms associated: sadness (53.3%), irritability (53.3%), inability to perform daily tasks (52.8%), changes in sleeping patterns (52%). Treatment options favored: talking to someone trustworthy (59.5%), praying to God (56.5%), consulting a psychologist/psychiatrist (52.3%). Education level significantly influenced perception ($p = 0.026$).	Perception of depression was skewed, and viewed more as sadness than a mental disorder. Stress was identified as a major cause. Importance of support system acknowledged. Education level influenced beliefs. Low SES associated with lack of understanding. Cultural and religious factors influence perceptions. Community-based programs and policies need to align with public views to create effective support systems. Limited to Karachi, may not represent wider population. Social stigma and financial constraints impact access to treatment.

Citation	Purpose	Sample/Setting	Methods (design, interventions, measures	Results	Discussion, interpretation, limitation of findings
					Education and awareness campaigns crucial for addressing misconceptions. Further research needed on effective implementation of community programs and policies.
Reuter et al. (2016).	Gain a preliminary understanding of Equatoguinean healthcare professionals' perspectives on the mental healthcare system.	Nine adult participants (directors or program managers) interviewed in July 2013 in Malabo, Equatorial Guinea. Participants were from government agencies, aid organizations, hospitals, and pharmacies.	Semi-structured interviews conducted in July 2013 in Malabo, lasting 25 ± 12 minutes, in Spanish. Interviews aimed to collect broad information about the mental healthcare system in Equatorial Guinea, professionals' perspectives, and access to resources. Ethical oversight committee approval obtained, and written consent secured from participants.	All interviewees indicated that the mental health system did not meet the needs of the community. Key factors limiting the effectiveness of mental healthcare included infrastructural capacity, stigmatization, and lack of resources such as training programs, knowledgeable staff, medications, and data. Views on the existence of mental health-specific infrastructure were inconsistent among respondents. Challenges included a lack of medications, access to trained mental health professionals, and limited mental health training programs within the country.	The study provided a preliminary understanding of existing mental healthcare needs in Equatorial Guinea. Identified opportunities for enhanced healthcare services, including infrastructure improvement, stigma reduction, better data collection, and increased governmental assistance. Challenges highlighted reflect those seen in other African countries and globally. Limitations included the small sample size, potential biases in participant selection, and the inability to generalize findings beyond the interviewed professionals.

Citation	Purpose	Sample/Setting	Methods (design, interventions, measures	Results	Discussion, interpretation, limitation of findings
Stefanovics et al. (2016).	Explore attitudes toward mental illness among health professionals	Health professionals (*n* = 902) from Brazil, China, Ghana, Nigeria, and the United States	Surveys conducted using a 43-item questionnaire covering attitudes and beliefs about mental illness.	No significant association between belief in supernatural and biopsychosocial causes of mental illness. Weak association found between biopsychosocial causation and less stigmatized attitudes. Cultural variations observed in attitudes.	Traditional beliefs coexist with contemporary perspectives. No evidence that traditional beliefs impede adoption of modern approaches. Methodological limitations included convenience sampling.
Ubaka et al. (1970).	Evaluate the prevalence of stigmatization among health professionals regarding mental illness in Nigerian hospitals.	Two tertiary hospitals in Eastern Nigeria: Federal Neuropsychiatric Hospital and Enugu State University Teaching Hospital.	Descriptive, cross-sectional, comparative survey using the Community Attitude to Mental Illness (CAMI-2) questionnaire. Statistical analysis included T-tests, ANOVA, and Pearson correlation.	Non-stigmatizing attitudes predominated among health professionals, with significant differences among pharmacists, doctors, and nurses ($p<0.006$). Factors contributing to stigmatizing attitudes included lack of contact with mentally ill individuals ($p<0.0001$), male gender ($p=0.008$), and fewer years of working experience ($p = 0.031$).	Nigerian health professionals generally exhibited non-stigmatizing attitudes toward the mentally ill. However, pharmacists, males, and those working in non-psychiatric hospitals showed higher stigmatizing attitudes when present. Limitations include potential response bias and the need for caution in generalizing findings to other settings and populations.

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Chapter 3: Manuscript Two – Stigma Towards Individuals with Mental Illness and Associative Stigma Experienced by African Immigrant Nurses in the United States

[This manuscript (#2) is intended for submission to the *International Journal of Mental Health Nursing*, the official journal of the Australian College of Mental Health Nurses.]

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Abstract

The study was a cross-sectional design. Participants were recruited in 2023 using voluntary response and snowball sampling (n = 73 African immigrant nurses) and completed self-report questionnaires with measures for stigma of mental illness, and associative stigma. Bivariate tests were used to assess differences in each stigma type (mental illness, associative) based on nurse characteristics. Linear regression models were used to examine associations between demographic characteristics of US-based African immigrant nurses and stigma/associative stigma, and the relationship between stigma and associative stigma among African immigrant nurses. Among the 73 participants, most were female (76.7%, n = 56). More than half of the sample participants had more than ten years of experience as a nurse (54.8%, n = 40). The average age at migration of the participants was 26.46 years (SD = 8.73). The average time since migration was 20.42 years (SD = 9.51). The average stigma towards mental illness score was 30.22 points (SD = 7.12) which indicates moderate level of stigma. Similarly, the average associative stigma score was 29.99 points (SD = 8.64) also indicates a medium-level stigma. There were no significant differences in stigma towards mental illness or associative stigma

based on age, gender, or years of nursing experience, and migration factors such as age at migration, time since migration, and acculturation in the adjusted model. Further research on how both types of stigma affect patient care is needed to develop anti-stigma interventions in healthcare settings. Complementing quantitative findings with qualitative research could also provide a more meaningful understanding of the associations.

Stigma Towards Individuals with Mental Illness and Associative Stigma Experienced by African Immigrant Nurses in the United States

African immigrant healthcare providers form a significant percentage of health providers in the United States and the proportion is growing. From 2006–2015, the population of African immigrants grew from 1.5 million to 2.1 million (U.S. Bureau of Labor Statistics, 2015). A third of this population has been working in healthcare (U.S. Bureau of Labor Statistics, 2015). There is some evidence that African healthcare providers may hold stigmatizing attitudes towards mental illness, and as the share of African immigrant healthcare providers in the United States grows, it is important to understand how stigma may affect patient care. Mental illness stigma is a complex social process grounded in stereotypes that people with mental illness are dangerous, unpredictable, violent, responsible for their illness, incompetent, unable to live independently, and should ultimately be ashamed of themselves (Stangl et al., 2019). Although societal stigmatization of mental illness is a problem that affects healthcare providers globally, cultural beliefs around mental illness in African countries may uniquely affect how African healthcare providers approach mental healthcare, even those who work in mental health settings directly (Ubaka et al., 2018). Studies of African healthcare providers have found that providers share the same or in some cases, even stronger perceptions of stigma towards people with mental illness than the public (Rössler, 2016; Stefanovics et al., 2016).

Due to underreporting and limited research of African healthcare providers, specific statistics on mental illness stigma are limited. However, in a study about attitudes of primary healthcare providers towards people with mental illness conducted in Zambia, widespread stigmatizing and discriminatory attitudes were reported among primary healthcare providers where 43.2% of the respondents believed that all people with mental illness had strange

behavior, 36% believed that people with mental illness were dangerous, 43.7% made a stereotyping statement that people with mental illness easily become ill, 67.5% believed that people with mental illness should not be treated in the same hospital as other patients, and 61.2% and 74.7% believed that people with mental illness should not work or have children, respectively (Kapungwe, 2011). Consequences of stigmatizing provider attitudes towards people with mental illness include reluctance to seek care and treatment when needed, prolonged rehabilitation, low self-esteem, limited access to employment, housing, social relationships, distress, poor quality of care, and reduced quality of life (Ubaka et al., 2018).

High levels of mental illness stigma observed among African immigrant healthcare providers stems from widespread negative beliefs regarding mental illness among members of African countries, in general. A study conducted in South Africa reported a low level of awareness regarding mental illness among the general public and a high degree of stigma towards people with this condition. Another study carried out in Nigeria found stigma towards people with mental illness to be widespread, whereby people in the community expressed that they would not condone any form of association with anyone with mental illness (Ubaka et al., 2018).

Community beliefs about mental illness that are negative and stigmatizing in nature in several African countries may partially explain why African healthcare providers have been found to hold stigmatizing beliefs (Ubaka et al., 2018). Prior research indicated that stigmatizing attitudes are not only found among health professionals generally but are even more pronounced among African healthcare professionals who have direct contact with individuals with mental illness (Kapungwe et al., 2011). Some evidence on the topic of mental illness stigma was mixed and suggested that stigma and discrimination against mental illness was less severe in African

countries, but there is insufficient research on this topic in African countries, with many countries understudied or unstudied, resulting in a lack of stigma awareness in the general population (Kapungwe et al., 2011).

In studying mental illness stigma among African immigrant healthcare providers towards patients, the dimensions of stigma that affect providers themselves must also be considered to effectively reduce stigma. Stigma can be transmitted from a stigmatized person or group to the people connected to them in a social or professional relationship (Rössler, 2016). This form of stigma directed is known as 'associative stigma.' Associative stigma may be acquired by healthcare providers due to their affiliation with people with mental illness (Fox et al., 2018). These providers are also targets of stigma and are prone to stereotyping, prejudice, and discrimination experiences (Fox et al., 2018). When associative stigma is considered, it is evident that there is dual stigmatization of individuals with mental illness and their providers affecting African immigrant healthcare providers, increasing potential risk for poorer quality of treatment and lower quality of life for people living with mental illness (Picco et al., 2018).

To reduce the harm of mental illness-related stigma, it is important to understand what provider-level factors affect stigma towards patients, as well as how stigma affects providers. There is very little research on mental illness-related stigma among African immigrant healthcare providers in the United States and addressing this knowledge gap is a high priority as the U.S. healthcare provider workforce is increasingly comprised of immigrant workers. Sociodemographic characteristics and culture can play a significant role in the degree of stigma that providers display (Adjorlolo et al., 2018). For example, a study conducted in Ghana found that mental health nurses who had practiced for at least six years had low levels of sympathy toward people with mental illness, thereby exhibiting increased stigma (Adjorlolo et al, 2018).

Other factors associated with mental illness-related stigma included gender, age, and cultural beliefs, with men and older nurses more likely to hold a belief that people with mental illness were to be blamed for their conditions (Adjorlolo et al., 2018).

There is potential for acculturation to have a significant influence on beliefs towards mental illness, given cultural differences between the United States and Africa. Acculturation is the psychological or behavioral change in culture resulting from migration (Mesoudi, 2018). A study reported that the United States may have relatively lower levels of stigma among healthcare providers compared to African countries due to several campaigns against stigma in the United States (Stefanovics et al., 2016). Thus, African immigrant nurses who acculturate to American culture may have reduced levels of stigma, but this has not yet been studied in research. Therefore, in this study, it is important to examine the degree of acculturation of U.S.-based African immigrant nurses to identify targets for future interventions to reduce stigma and determine whether there is a significant relationship between their degree of acculturation and stigma towards mental illness.

Some Africans believe that the causes of mental illness are supernatural or spiritual, and healthcare professionals may be influenced similarly (Makanjuola, 2016; Stefanovics et al., 2016). Africans believe that people with mental illness should be cared for by traditional healers, herbalists, and religious leaders (Stefanovics et al., 2016). In a study conducted in Sudan, Central Africa, on the perceptions of psychiatrists and other providers about barriers to mental health utilization, psychiatrists expressed that people are usually more comfortable taking their family members with mental illness to traditional healers than taking them to psychiatric hospitals (Ali & Agyapong, 2016). Sudanese participants also expressed a belief that psychiatric hospitalizations may lead to negative labeling and marginalization in that community (Ali &

Agyapong, 2016). Across the board, there is evidence for a frequent belief in African countries that mental illness is caused by witchcraft, possession of evil spirits, curses or divine punishment, bad luck, destiny, or the will of God (Adewuya et al., 2017; Adjorlolo et al., 2016; Stefanovics et al., 2016). These beliefs about the origin of mental illness partially explain high levels of mental illness stigma and a risk for associative stigma among Africans, including African healthcare providers and those who immigrate.

Dual stigmatization of mental illness among African immigrant healthcare providers, expressed towards patients and internalized among themselves, is important to address in light of the high prevalence of mental illness in the United States and growing segment of the healthcare workforce comprised of African immigrant providers. Mental illness remains pervasive in the United States, with 51.5 million people estimated to be affected by mental health conditions (SAMHSA, 2018). Of these people, 55.2% did not receive treatment in 2017 (SAMHSA, 2018). Stigma is a major barrier to the quality of mental healthcare provided and recovery, and it is important to investigate stigma among African immigrant healthcare workers who might have distinct views on, and experiences of, mental illness or manifestations of stigma that should be targeted with interventions (Knaak et al., 2017). Understanding who is affected by dual stigmatization of mental illness among African immigrant healthcare providers is a first step to developing interventions. Thus, the objectives of this study were to: (1) identify which demographic and migration characteristics of U.S.-based African immigrant nurses were associated with stigma towards people with mental illness, and (2) examine the relationship between the level of associative stigma experienced by African immigrant nurses and stigma towards people with mental illness. I hypothesized that acculturation would be associated with

less stigmatizing views towards mental illness, and that associative stigma would be linked with more stigmatizing views towards mental illness.

Methods

Conceptual Framework

I used the MISF to guide the study. Because the literature on mental illness stigma is large and complex, this framework was developed to bring consistency and clarity to the conceptualization and measurement of mental illness stigma in research (Fox et al., 2018). The three MISF concepts that are most relevant to mental healthcare providers and stigma are stereotypes, prejudice, and discrimination (Fox et al., 2018). These three concepts represent the cognitive, affective, and behavioral responses most providers may have towards individuals with mental illness.

Research Design

This study was a descriptive, cross-sectional survey. The survey was conducted online between February and May 2023 in the United States. The Institutional Review Board at the University of California, Los Angeles, approved the study protocol.

Recruitment and Eligibility

The study population was nurse practitioners and registered nurses working in any healthcare setting. African-born male and female nurse practitioners and registered nurses aged 18 years or older who had been exposed to patients with mental illness and had at least one year of experience were eligible for inclusion in this study. Participants were recruited through social media platforms such as Facebook, Twitter, LinkedIn, and Instagram. A flyer was designed with basic information about the study and a link to enroll in the study by completing the survey. The flyer was posted on social media platforms for three months. One hundred four people clicked on

the survey link. Of these, 75 completed the survey. Two participants were found to have incomplete data for key measures and were excluded, for a final sample of 73 U.S.-based African immigrant registered nurses and nurse practitioners, who were recruited for this study using voluntary response, purposive, and snowball sampling, as described below.

Study Instruments

Survey measures included the OMS-HC, the M-BIQ Scale, and the CASS.

Dependent Variables

The OMS-HC is a self-report 15-item questionnaire, designed to measure mental illness stigma in the healthcare provider population. The scale is scored by assigning scores to each item placed on a Likert scale (from 'strongly agree = 5' to 'strongly disagree = 1'), for a total score range of 15–75 with higher scores denoting higher levels of stigma. Items 7, 11, 12, 13, and 19 were reverse-coded. The internal consistency reliability of the OMS-HC has been found to be 0.82 (Modgil et al., 2014). In my sample, Cronbach's alpha was 0.66, indicating acceptable internal consistency reliability.

The CASS measured associative stigma (dependent variable) among the nurses and nurse practitioners. The first five items of the CASS were answered using a 5-point Likert scale ('never = 1,' 'rarely = 2,' 'sometimes = 3,' 'often = 4,' and 'all the time = 5'). The last six questions were answered using the following response categories: (1) strongly agree; (2) slightly agree; (3) neither agree nor disagree; (4) slightly disagree; and (5) strongly disagree. Scores on the CASS range from 18–72, and higher scores denote higher levels of perceived associative stigma (Almuzini et al., 2020). Internal consistency for the CASS was 0.80 in the study sample, indicating acceptable internal consistency.

Independent Variable

The M-BIQ Scale is an acculturation scale that has been adapted culturally and linguistically and modified for the measurement of acculturation among African immigrants (Johnson-Agbakwu et al., 2016). The modified version of the M-BIQ is scored on a 3-point Likert scale (from 'always = 3' to 'never = 1'), for a total score range of 33–99, with higher scores denoting a higher degree of acculturation. The instrument has been found to have high internal consistency and reliability across ethnicity and geographic locations with alpha values from 0.68–0.92 (Johnson-Agbakwu et al., 2016). In the study sample, the internal consistency was in this same range, at 0.82.

Covariates

I measured demographic characteristics including age, gender (man, woman), and years of nursing experience (<5, 6–10, >10). I also measured migration factors including year of migration, time since migration, and acculturation.

Procedures

The study recruitment flyer was posted on Facebook, Instagram, and LinkedIn social media platforms. Snowball sampling was encouraged as potentially eligible participants enrolled to enhance recruitment of the target population, whereby identified participants were asked to assist in identifying friends or colleagues who could be potential subjects. All participants in this study were screened by answering inclusion criteria questions, and those who met the eligibility criteria were directed to the information sheet for the study where they gave consent. They completed the self-report questionnaires which took the participants from 20–30 minutes to complete. Overall, the survey had 83 questions. Participants had the opportunity to enroll in a raffle draw. Two winners were selected randomly for chances of winning an iPad each.

Statistical Analysis

Data were analyzed using IBM-SPSS version 20. Descriptive statistics were used to examine the demographic information of participants. Bivariate tests (*t*-tests, ANOVA) were conducted to examine whether stigma towards mental illness and associative stigma differed across genders and years of nursing experience. Simple linear regression models were estimated to investigate the relationship between stigma towards people with mental illness and each demographic predictor variable. That is, each demographic variable, including age, gender, time since migration, age at migration, degree of acculturation, and years of experience as a nurse (independent variables) was individually regressed against the stigma towards people with mental illness. Following these tests, a multiple linear regression model was estimated to obtain adjusted results by considering all demographic variables simultaneously. Next, I examined the correlation of associative stigma and stigma towards mental illness using the same analytic process described previously, including simple linear regression models for each independent variable and associative stigma, followed by a multiple linear regression model with all independent variables.

Results

Among the 73 participants, more than three-fourths of the participants were female (76.7%, $n = 56$). More than half of the sample participants had more than ten years of experience as a nurse (54.8%, $n = 40$). The average age of the participants in the study was 47.19 years ($SD = 10.09$). The average age at migration was 26.46 years ($SD = 8.73$). The average time since migration was 20.42 years ($SD = 9.51$). The average stigma towards people with mental illness score was 30.22 points ($SD = 7.12$). Similarly, the average associative stigma score was 29.99 points ($SD = 8.64$). Both scores indicated a moderate level of mental illness stigma and

associative stigma. Additionally, the average degree of acculturation was 76.92 (SD = 0.97) (see Table 3).

With regards to differences in stigma towards mental illness across genders, there were no significant differences in stigma towards mental illness between males and females (t (71) = 0.71, p = 0.48). Similarly, there were no significant differences in associative stigma between males and females (t (71) = –0.57, p = 0 .57). There were no significant differences in stigma towards people with mental illness across years of nursing experience (F (3, 69) = 2.16, p = 0.10) or associative stigma across years of nursing experience (F (3, 69) = 1.20, p = 0.32), as shown in Table 4.

In assessing bivariate relationships between demographic factors and stigma towards mental illness, I found a significant relationship between years of experience and stigma towards mental illness (see Table 5). That is, nurses with 1–5 years of experience expressed significantly more mental illness stigma compared to nurses with experience of more than 10 years (b = 3.97, p = 0.04). There was no significant relationship between stigma towards mental illness and age (b = –0.04, p = 0.62), gender (b = –.40, p = 0.48), time since migration in years (b = –0.14, p = 0.11), age at migration (b = 0.13, p = 0.18), or degree of acculturation (b = –0.06, p = 0.55).

When all demographic factors were modeled together to identify factors associated with stigma towards mental illness, none of the independent variables was significantly associated with stigma towards mental illness (see Table 6). In subsequent analyses of associative stigma, I observed a significant positive relationship between the level of associative stigma experienced by African immigrant nurses and stigma toward mental illness (see Table 7). For every one-point increase in associative stigma, on average, stigma toward people with mental illness was increased by 0.29 points (b = 0.29, p = .02). However, this finding was no longer statistically

significant when models were adjusted for demographics (age, gender, experience, acculturation, time since migration, and age at migration).

Discussion

This study examined demographic and migration factors associated with two types of stigma (mental illness stigma, associative stigma) among U.S.-based African immigrant nurses. In my analyses, the study's hypotheses were not supported as the statistical results in the fully saturated model (multiple regression) were not statistically significant and I did not observe a significant relationship between acculturation and mental illness stigma. These findings are inconsistent with prior work on this topic. In a study conducted in Nigeria, a higher stigma toward mental illness was observed among females compared to male healthcare professionals (Ubaka et al, 2018). The same study found an association between years of experience and stigma towards mental illness, where health professionals with less experience (less than or equal to five years) displayed a higher stigma towards mental illness. A similar study conducted in Ghana found stigmatizing attitudes among nurses who had practiced for six years or more compared with those with fewer years of experience (Adjorlolo et al., 2018). The study also found an association between age, gender, and stigma towards mental illness whereby male professionals aged 30 years and over had higher stigmatizing attitudes towards mental illness. A third study that examined stigma towards mental illness in Zambia had a similar result on years of experience and stigma towards mental illness in their study (Kapungwe et al., 2011). Years of experience in a mental health hospital was also found to be correlated with moderate associative stigma, whereby professionals with at least ten years in service were more likely to experience higher associative stigma than those who are less experienced (Picco et al., 2019).

There are several possible explanations for these findings. Firstly, Africa is a large continent with diverse regions and heterogeneity in culture and beliefs across countries. Some areas do not have a concept for stigma of mental illness, so participants may not have had awareness of these beliefs or understanding of concepts in the measures as they were intended to be read. For instance, in a systematic literature review from sub-Saharan Africa by Spittel et al. (2019), the authors reported misconceptions and poor knowledge about mental illnesses and how these factors challenge stigmatization issues, including how powerful and influential superstitious perceptions of mental illnesses and stigma were pervasive in Sub-Saharan communities. This finding may indicate a need to develop more culturally sensitive measures of stigma that are applicable to specific countries and regions in Africa and other understudied areas.

Another plausible explanation for my results may be related to acculturation. I observed that acculturation was not significantly associated with stigma. Even though stigma is prevalent in African countries, not all providers held stigmatizing beliefs, and it is possible that those who chose to migrate might not hold the same level of stigma. Some African providers may have been educated in the United States or Europe and may not hold the same level of stigmatizing beliefs due to differences in education concerning mental illness. Even if providers acculturated or obtained their education in other places, this may not be sufficient to change beliefs surrounding mental illness stigma, or alternatively they may have acculturated into a culture in the United States that was equally stigmatizing but manifested in different ways. Further research is needed to confirm the nature of this relationship.

Stigma is a complex phenomenon with many facets, which can be influenced by several interrelated causes (Epner & Baily, 2012). The complexity of stigma experienced by African

immigrant nurses in the United States may not have been fully captured by the variables used in the analysis. Unmeasured variables, such as workplace dynamics, cultural perceptions, and personal beliefs may affect how people view mental illness and the associative stigma. In our study, the cultural phenomenon, cultural nuances, and variances in the perceptions of mental illness may not have been adequately reflected in measures. Also, the impact of the overlap of the various intersectional factors such as age, gender, years of experience, immigration status, and degree of acculturation may further complicate the association between demographic variables and stigma. This may create an intersection between cultural influences and other factors and may affect the complex interplay of stigmatizing attitudes toward mental illness. Therefore, an extensive investigation of cultural influences among the African immigrant population, including the use of qualitative research methodology, comprising in-depth interviews or focus group discussions, may enhance our understanding of how dual stigmatization affects African immigrant healthcare providers.

In this study, years of experience had a significant association with stigma of mental illness in the bivariate analysis; however, this was no longer observed in the adjusted model. Also, the other demographic variables did not have any statistical significance. This lack of demographic significance may suggest that such factors as age, gender, years of experience and other migration factors did not influence stigma independently. Other factors that may be relevant for explaining my findings are the modest sample size and potential for unmeasured confounders. Such unaccounted-for variables could be responsible for the absence of significant relationships by influencing both associative stigma and stigma related to mental illness. Statistical power may be enhanced by a larger sample size to detect smaller, but potentially clinically interesting effects.

This has been a preliminary, exploratory study of mental illness stigma among African immigrant nurses that extended work done in African countries to the United States. Although findings were insignificant with a small and nonrepresentative sample, methods used in this study may be refined and replicated in future work to understand dual stigmatization among African immigrant healthcare providers. A limitation of my study has been the cross-sectional design, which limited my ability to draw any definitive conclusions about the relationship between the stigma towards mental illness and its correlates and associative stigma experienced by African immigrant nurses. The sampling methods I adopted in this study have had limitations, as voluntary response, purposive, and snowball sampling methods combined meant that findings could not be generalized to all African immigrant, registered nurses and nurse practitioners based in the United States. In addition, data were self-reported and thus bias in stigma measurements was possible.

Conclusions

Stigma towards mental illness is endemic within mental healthcare settings and African immigrant nurses are affected by dual stigmatization of mental illness in their work. The primary goal of all nurses is to provide care most ethically, and more importantly to maintain this ethical environment through safe, respectful, compassionate, dignified, and benevolent care (Ostman et al., 2019). My study of African immigrant nurses had the potential to provide valuable insights into future research on dual stigmatization and support African immigrant nurses in ethical practice in caring for patients with mental illness. Future research that involves the use of qualitative methods to complement quantitative findings could provide a deeper insight into the lived experiences and cultural nuances influencing the relationship between stigma towards mental illness and associative stigma experienced by African immigrant nurses and provide

direction for quantitative measures that should be included in future studies. Exploring these associations in a longitudinal method as against a cross-sectional survey could provide insights into the dynamic nature of stigma and its potential changes throughout a nurse's career. These factors may influence the development of effective antistigma interventions in healthcare settings and improve the quality of care that nurses provide to their patients, while African immigrant nurses also, on the other hand, can develop higher self-esteem and feel more satisfied with their jobs.

Tables

Table 3

Sample Characteristics

Characteristic	*n* (%)	M (SD)
Gender		
Male	17 (23.3)	
Female	56 (76.7)	
Years of experience		
< 5 years	22 (30.1)	
6–10 years	10 (13.7)	
>10 years	40 (54.8)	
Age (years)		47.19 (10.09)
Age at migration		26.46 (8.73)
Years since migration (years)		20.42 (9.51)
Stigma towards mental illness		30.22 (7.12)
Associative stigma		29.99 (8.64)
Degree of Acculturation		76.92 (0.97)

Note. Nurses and nurse practitioners (n = 73) who participated in an online survey of mental illness stigma among African immigrant healthcare providers. M = mean, SD= standard deviation. *p < .05, **p <.01, ***p <.001

Table 4

Comparison of Stigma Towards People With Mental Illness and Associative Stigma by Demographics

Outcome	Factor		*M* (SD)	Statistic (*p*-value)
Stigma towards mental illness score	Gender	Male	31.29 (6.28)	0.71 (0.481)
		Female	29.89 (7.38)	
	Years of nursing experience	Less than 1 year	39.00 (0.00)	2.16 (0.101)
		1–5 years	32.82 (7.18)	
		6–10 years	29.10 (7.81)	
		Greater than 10 years	28.85 (6.62)	
Associative stigma score	Gender	Male	28.94 (8.90)	–0.57 (0.573)
		Female	30.30 (8.62)	
	Years of experience	Less than 1 year	27.00 (0.00)	1.20 (0.316)
		1–5 years	27.64 (8.75)	
		6–10 years	28.60 (2.59)	
		Greater than 10 years	31.70 (9.40)	

Note. Nurses and nurse practitioners ($N = 73$) who participated in an online survey of mental illness stigma among African immigrant healthcare providers. *M* = mean, *SD* = standard deviation. *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$

Table 5

Relationship Between Demographic Characteristics of U.S.-Based African Immigrant Nurses and Stigma Towards People With Mental Illness

Factors	Model 1 Beta (SE)	Model 2 Beta (SE)	Model 3 Beta (SE)	Model 4 Beta (SE)	Model 5 Beta (SE)	Model 6 Beta (SE)
Constant	32.18(4.04)	32.70(3.60)	33.13(1.96)	26.81(2.73)	30.97(7.87)	28.85(1.1)
Age	–0.04(0.08)					
Gender						
Male		–1.40(1.98)				
Female		Reference				
Time since migration			–0.14(0.09)			
Age at migration (yrs.)				0.13(0.10)		
Acculturation (score)					–0.06(0.10)	
Years of experience						
<1 year						10.15(7.05)
1–5 years						3.97(1.85)*
6–10 years						0.25(2.46)
>10 years						Reference
R-square	0.003	0.01	0.04	0.03	0.01	0.09
F-statistic	0.25	0.50	2.68	1.80	0.37	2.16

Note. Nurses and nurse practitioners (n = 73) who participated in an online survey of mental illness stigma among African immigrant healthcare providers. M = mean, SD = standard deviation. Standard Errors (SE) appear in parentheses, Exp. = Experience (in years), Outcome: Stigma of mental illness. This table shows a series of simple linear regression models (6 models total). *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$

Table 6

Relationship Between Demographic Characteristics of U.S.-Based African Immigrant Nurses and Stigma Towards People With Mental Illness (Multiple Regressions)

	B	SE	t	P
(Constant)	30.61	11.34	2.70	0.01
Age	–0.15	0.50	–0.31	0.76
Gender (Male)	0.16	2.26	0.07	0.94
Age at Migration	0.23	0.48	0.48	0.63
Time since Migration (years)	0.13	0.49	0.26	0.79
Degree of Acculturation	–0.04	0.11	–0.37	0.71
Experience (<1 year)	10.03	7.57	1.33	0.19
Experience (1–5 years)	3.55	2.46	1.45	0.15
Experience (6–10 years)	0.07	2.62	0.03	0.98

Note. Nurses and nurse practitioners (n = 73) who participated in an online survey of mental illness stigma among African immigrant healthcare providers. M = mean, SD = standard deviation. *F-Statistic* = 0.93, *R-square* = 0.11.

Table 7

Relationship between Level of Associative Stigma Experienced by African Immigrant Nurses and Stigma Towards People With Mental Illness

Factors	Model 1: Beta (SE)	Model 2: Beta (SE)
Constant	23.26 (3.06)	24.32 (11.60)
Associative stigma	0.29 (0.12)*	0.25 (0.13)
Age		–0.22 (0.49)
Gender (male)		0.35 (2.21)
Female		Reference
Time since migration		0.19 (0.48)
Age at migration		0.28 (0.47)
Acculturation		–0.03 (0.11)
Experience (< 5 years)		3.14 (2.42)
Experience (6 to 10 years)		–0.11 (2.57)
Experience (>10 years)		Reference
R-square	0.07	0.16
F-statistic	5.58*	1.26

Note. Nurses and nurse practitioners (n = 73), who participated in an online survey of mental illness stigma among African immigrant healthcare providers. *M*= mean, *SD*= standard deviation. Standard Errors (SE) appear in parentheses, Outcome: Stigma towards mental illness.

*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$

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Chapter 4: Manuscript Three – Relationship Between the Associative Stigma/Stigma Towards Mental Illness Among U.S.-Based African Immigrant Nurses and Occupational Burnout

[This manuscript (#3) is intended for submission to *Issues in Mental Health Nursing*].

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Abstract

African immigrant nurses have increasing dissatisfaction and burnout in their jobs. This is especially evident among mental health professionals, whose risk for burnout may be compounded by associative stigma—that is, stigma experienced by health care professionals because of their association with a stigmatized population of patients. There is limited research on associative stigma or mental health-related stigma as risk factors for burnout. Thus, this study examined the relationship between 1) mental illness stigma and burnout, and 2) associative stigma and burnout among US-based African immigrant nurses. The study used a cross-sectional conducted in 2023. Participants (n=73) were recruited using voluntary response, purposive, and snowball sampling. An online survey was used to administer a series of self-report measures of associative stigma, burnout, and nurse characteristics. Linear regression models were used to examine associations between associative stigma of professionals and occupational burnout and between stigma towards patients and occupational burnout. Of the 73 African immigrant nurse participants, 76.7% (n=56) were female, 54.8% (n=40) had over ten years of experience as nurses, and the average time since migration was 20.42 years. A significant positive relationship between stigma towards people with mental illness and occupational burnout was found (b =

0.16, $p = 0.03$); likewise, a significant positive relationship between associative stigma and occupational burnout ($b = 0.61$, $p = 0$ .01) among these US-based African immigrant nurses. These results suggest that the stigma of patients and the associative stigma experience of African immigrant nurses are associated with occupational burnout, and interventions should target these areas in healthcare workplaces to reduce burnout thus increasing the quality of care provided by these nurses

Relationship Between the Associative Stigma/Stigma Towards Mental Illness among U.S.-Based African Immigrant Nurses and Occupational Burnout

Nurses and other healthcare providers have experienced increasing dissatisfaction and burnout with their jobs (Picco et al., 2019; Zaninotto et al., 2018;). A high prevalence of occupational burnout up to 67% among healthcare professionals is a major factor that contributes to their attitudes towards their patients, which has great consequences on the quality of care that they provide (Zaninotto et al., 2018). High levels of burnout are associated with diminished care, unethical behaviors, low client satisfaction, and higher staff turnover (Yanos et al., 2017). These factors may inhibit rehabilitation and recovery for patients. Although burnout is a problem for the nursing workforce as a whole, subgroups of nurses may be at higher risk for occupational burnout. One such group that is under- researched is African immigrant nurses.

One potential unexplored risk factor for burnout is associative stigma. Stigma is a damaging feature of social interaction that is characterized by prejudice, discrimination, and ignorance (Ighodaro et al., 2014). Stigma towards people with mental illness creates a devalued identity expressed in stereotypes about the behaviors of people with mental illness that results in social rejection as individuals are considered dangerous, weaker in character, dependent, irresponsible, and incompetent (Feldman & Crandall, 2007). There have been several research studies conducted previously to explore and understand mental illness stigma expressed by providers to patients. However, stigma operates in the opposite direction, from patients to providers (Picco et al., 2019).

Associative stigma occurs when the same negative characteristics of stigma directed at people with mental illness are redirected at the healthcare professionals because of their association with these patients (Waddell et al., 2020). Psychiatric nurses experience associative

stigma both from within the nursing profession and from outside their profession—that is, in society (Domingue et al., 2022). For example, studies of psychiatric nurses have found that they are perceived as less skilled, inefficient, or mere 'babysitters,' who also may possess neurotic tendencies and exhibit the same signs and symptoms as their patients such as fear, anxiety, depression, and irritability (Domingue et al., 2022). Colleagues in other departments of nursing may display stereotyping negative attitudes towards mental health nurses, such as the idea that mental health practitioners are inept, devalue their work, are unskilled, and are less beneficial to their patients (Njaka et al., 2023). Similarly, friends, family members, and people in society at large uphold the negative perception that mental health nurses may have been impacted negatively by their work environment, thus exhibiting negative mental health symptoms like their patients. Mental health nurses have reported experiences of undue biases, negative judgments, rejection, and labeling due to their association with patients with mental illness (Buertey et al., 2020). In this way, mental illness stigma, expressed by providers towards patients, may be a precursor to associative stigma, which, in turn, may be a risk factor for adverse occupational outcomes.

Associative stigma has several documented negative impacts on health professionals and may be a risk factor for burnout. On average, 40% of mental healthcare providers experienced high emotional exhaustion related to their work (Clough et al., 2019). In addition to occupational stressors related to the job, such as elevated workload, time pressure, and chronic contact with the physical and emotional pain of their patients, mental healthcare workers faced other tensions that included patient suicide, aggressive behavior, challenging relationships with patients and families, working with interdisciplinary teams, and the stigma unique to their profession (Clough et al., 2019; Zaninotto et al., 2018). Altogether, these factors have resulted in burnout among

nurses and other health professionals, estimated at between 21%– 67% (Clough et al., 2019). Nurses may be reluctant to seek help for occupational burnout due to fear of colleagues finding out about their challenges, being perceived as weak or incompetent, or a belief that they should not require support (Clough et al., 2019). Unaddressed occupational burnout may result in increased absenteeism and employee turnover, as well as low job satisfaction and decreased quality of care (Clough et al., 2019; Yang et al., 2015).

A small number of studies have explored associative stigma among nurses and overall found that associative stigma has a negative impact on nurses (Buertey et al., 2020; Domingue et al., 2022; Njaka et al., 2023; Yanos et al., 2017). For example, one study found that participants' endorsements of associative stigma experiences varied, with about 10% stating that they have heard other people complain that mental healthcare job is pointless and over 85% supporting the idea that people tell them they could never do their kind of work when they learn it involves people with serious mental illness (Yanos et al., 2017).

However, several gaps in the literature remain. Existing studies have been carried out in Asia and Western settings, with no studies to date of African nurses based in the United States (Picco et al., 2019; Zaninotto et al., 2018). Although a few studies have explored stigma towards people with mental illness in Africa and other parts of the world, less is known about the experiences of associative stigma among the African immigrant population in the United States (Gandhi et al., 2019; Mosaku & Wallymahmed, 2015). Investigating associative stigma among African immigrant nurses is important because its consequences may impact the well-being of the nurses and the quality of care they provide. In like manner, mental illness stigma is a precursor to associative stigma, and I aimed to understand the relationship between both of these interrelated stigma constructs and burnout. Thus, the purpose of this study was to investigate: (1)

associative stigma experienced by U.S.-based African immigrant nurses and its association with occupational burnout; and (2) the relationship between African immigrant nurses' stigma towards people with mental illness and the nurses' occupational burnout.

Methods

Research Design

This study was a descriptive, cross-sectional design with voluntary response, purposive and snowball sampling. Online responses to a survey were collected in the United States between February and May of 2023, with additional snowball sampling in Los Angeles. Los Angeles was selected as a location for additional recruitment as a large, urban population center in the Western United States, where an estimated 10% of the African immigrant population in the United States resides (Pew Research Center, 2022). The Institutional Review Board of the University of California, Los Angeles, approved the study protocol.

Recruitment and Eligibility

The study population was nurse practitioners and registered nurses in any healthcare setting. Inclusion criteria were nurse practitioners or registered nurses who were born in Africa, were at least eighteen years old, spoke English, and had at least one year of experience as a nurse and had exposure to caring for patients with mental illness. Social media sites including Instagram, LinkedIn, Facebook, and Twitter were used to recruit participants with an informational flyer and link to the survey. For three months, the flyer was shared on social networking sites. During this time period, there was snowball sampling of African immigrant nurses who were potentially eligible participants. In total, 73 African immigrant registered nurses and nurse practitioners were recruited from 104 clicks on the survey link. There were 75 respondents, but two cases had incomplete data and were therefore excluded.

Measurements

Survey measures included the OMS-HC, M-BIQ, CBI Scale, and CASS.

Independent Variables

The OMS-HC includes 15 self-reported items. It was designed to measure stigma towards people with mental illness among healthcare providers. Each item was scored on a Likert scale ranging from 1–5 (‘strongly agree = 5’ to ‘strongly disagree = 1’), for a total score range of 15–75, with higher scores denoting higher levels of stigma. Items 7, 11, 12, 13, and 19 were reverse-coded. The internal consistency reliability of the OMS-HC is 0.82 (Modgill et al., 2014). The internal consistency reliability of the OMS-HC in the sample was 0.66.

The M-BIQ Scale is an acculturation scale that has been adapted culturally and linguistically and modified for the measurement of acculturation among African immigrants (Johnson-Agbakwu et al., 2016). The modified version of the M-BIQ is scored on a 3-point Likert scale (from ‘always = 3’ to ‘never = 1’), for a total score range of 33–99, with higher scores denoting a higher degree of acculturation. The instrument has been found to have high internal consistency and reliability across ethnicity and geographic locations with alpha values from 0.68–0.92 (Johnson-Agbakwu et al., 2016). In the study sample, the internal consistency was in this same range, at 0.82.

The CASS is an 11-item questionnaire that measures associative stigma among nurses. The first five items were rated on a 5-point Likert scale (‘never = 1,’ ‘rarely = 2,’ ‘sometimes = 3,’ ‘often = 4,’ and ‘all the time = 5’). An additional six questions had the following categories and were reverse coded: (1) strongly disagree; (2) slightly disagree; (3) neither agree nor disagree; (4) slightly agree; and (5) strongly agree. Scores on the CASS range from 11–55 and

higher scores denote higher associative stigma. The internal consistency reliability in this sample was 0.80, indicating acceptable reliability.

Dependent Variable

The CBI is an 18-item instrument that measures three components of burnout; namely, personal burnout, work-related burnout, and client-related burnout (Broderick et al., 2021). It consists of six personal-related items, seven work-related items, and six client-related items. The items are designed on a 5-point Likert scale (Broderick et al., 2021). Response categories on the personal burnout were: 'always,' 'often,' 'sometimes,' 'seldom,' and 'never/almost never.' Their scores were: always: 100; often: 75; sometimes: 50; seldom: 25; and never/almost never: 0. The total score on the scale is the average of the scores on the items. Response categories on work-related burnout subscale were: 'To a very high degree,' 'To a high degree,' 'Somewhat,' 'To a low degree,' and 'To a very low degree' for the first three questions. The last four questions used responses categories of 'always,' 'often,' 'sometimes,' 'seldom,' and 'never/almost never.' Scoring was same as in the first scale. In the client-related burnout scale, scoring was similar to the first two subscales, while response categories were the same as the work-related subscale. An average score of 50 or higher within the 0–100 range indicated high levels of burnout (Broderick et al., 2021). The CBI has high internal reliability and validity on all three subscales (Kristensen et al., 2005). Cronbach's alpha for personal burnout and work-related burnout scales were 0.87, while client-related subscale alpha was 0.85 (Kristensen et al., 2005). In our sample, the internal consistency was 0.86. The CBI has been used in several countries and translated into different languages (Kristensen et al., 2005).

Covariates

I measured demographic characteristic including age, gender (man, woman), years of nursing experience (<5, 6–10, >10 years). Others were migration factors including year of migration, time since migration and acculturation.

Data Collection

The survey flyer was distributed using voluntary response and snowball sampling methods described previously. Participants who followed the Qualtrics survey link were first directed to an eligibility screening, and then the study's information sheet, where they provided their consent. At the click of the next button, they proceeded to the self-administered 85-item survey, which required 20–30 minutes to complete. Participants had the opportunity to enroll in a raffle draw. Two winners were selected randomly for chances of winning an iPad each.

Statistical Analysis

The data were analyzed using IBM-SPSS version 20. Descriptive statistics and frequencies were used to examine the demographic information of participants. Bivariate tests (*t*-tests and ANOVA) were carried out to detect differences in key study variables (stigma towards people with mental illness, associative stigma, and burnout) by gender and years of experience. To address Aim 1, simple linear regression models were estimated to examine the association between associative stigma of U.S.-based African immigrant nurses and occupational burnout, followed by a multiple regression model that controlled for demographic and migration variables as listed above. To address Aim 2, simple linear regression models were estimated to investigate the relationship between stigma of mental illness and occupational burnout score. Then, a multiple linear regression model was estimated to predict occupational burnout scores from

stigma while controlling for demographic variables and migration factors (age, gender, time since migration, age at migration, degree of acculturation, and years of experience as a nurse).

Results

The distribution of sociodemographic characteristics is displayed in Table 8. The sample (n = 73) comprised registered nurses and nurse practitioners. More than three-fourths were female (76.7%, n = 56) and had been working as nurses for more than ten years (54.8%, n = 40). The average age of the participants in the study was 47.19 years (SD = 10.09). The average age at migration of the participants was 26.46 years (SD = 8.73). The average time since migration was 20.42 years (SD = 9.51). The average stigma towards mental illness score was 30.22 points (SD = 7.12) which indicated moderate level of stigma. Similarly, the average associative stigma score was 29.99 points (SD = 8.64), also signifying moderate associative stigma. The average occupational burnout score was 47.07 points (SD = 12.55) and the average degree of acculturation was 76.92 (SD = 0.97) (see Table 8).

A *t*-test was used to examine whether stigma towards people with mental illness, associative stigma, and occupational burnout differed by sex. There were no significant differences in scores for any of these three measures by sex and years of experience as a nurse (see Table 9).

The relationship between associative stigma experienced by African immigrant nurses and occupational burnout was tested and the results of simple (Model 1) and multiple linear regression (Model 2) are presented in Table 10. In unadjusted analyses for Aim 1, the analyses showed that there was a significant positive relationship between associative stigma and occupational burnout (see Model 1, Table 10). The results indicated that for every one-point

increase in associative stigma score, on average, occupational burnout significantly increased by 0.64 points ($b = 0.64$, $p = .004$).

The significant relationship between associative stigma experience of U.S.-based African immigrant nurses and occupational burnout still existed when controlling for demographic factors (see Model 2, Table 10). The analyses showed that if associative stigma increased by one point, on average, occupational burnout significantly increased by 0.61 points when controlling for age, gender, time since migration, age at migration, acculturation, and years of experience as a nurse ($b = 0.61$, $p = 0$ .01). This indicated that higher level of associative stigma of U.S.-based African immigrant nurses is associated with higher level of occupational burnout.

In Aim 2, the results of the simple (Model 1) and multiple (Model 2) linear regression are presented in Table 11, to examine if there was an association between the stigma towards mental illness among U.S.-based African immigrant nurses and occupational burnout. The analyses showed that there was a significant positive relationship between the stigma towards mental illness among U.S.-based African immigrant nurses and occupational burnout (see Model 1, Table 11). It was found that for every one-point increase in stigma toward people with mental illness, on average, occupational burnout among U.S.-based African immigrant nurses increased by 0.60 points ($b = 0.60$, $p = 0.003$). This indicated that a higher level of stigma towards people with mental illness among U.S.-based African immigrant nurses was associated with a higher level of occupational burnout.

It was also shown that the relationship between stigma towards people with mental illness among U.S.-based African immigrant nurses and occupational burnout was still significant when controlling for demographic factors (see Model 2, Table 11). The analyses showed that if stigma towards mental illness increases by one point, on average, occupational burnout score increased

by 0.47 points after adjusting for sociodemographic variables of age, gender, time since migration, age at migration, acculturation, and years of experience as a nurse ($b = 0.47$, $p = 0.032$).

Discussion

There has been a dearth of research on associative stigma that African immigrant nurses have been experiencing, and to the best of my knowledge, this is the first study to explore associative stigma and its impact on occupational burnout among African immigrant nurses based in the United States. My study found a significant, positive association between associative stigma and occupational burnout among African immigrant nurses in the United States. To further explain and understand background factors affecting the burnout-associative stigma relationship, I examined mental illness stigma and its relationship to burnout, which I expected to be similarly associated. I observed a significant, positive relationship between stigma towards patients and occupational burnout among their nurses. The fully saturated model explained 22% of the variability in occupational burnout scores. Consistent with prior research, I did not find differences in mental illness stigma or associative stigma based on sex and years of experience (Verhaeghe & Bracke, 2012).

My findings aligned with prior research by Zaninotto et al. (2018), which was conducted with a sample of mental health professionals from community mental health institutions and found that negative and discriminating attitudes toward patients may be an indication of the degree of burnout among health professionals. This same study found an association between a lower level of personal accomplishment among mental health professionals and stereotyping and rejecting attitudes towards patients, connecting the relationship between burnout dimensions and stigma. Likewise, a cross-sectional study of providers working in a large community mental

health center found that associative stigma correlated with increased burnout and negative job satisfaction among mental health professionals (Yanos et al., 2020). The study concluded that perceptions of associative stigma may contribute to increased burnout among mental healthcare providers. In another study that utilized randomization for sample selection from diversified psychiatric centers, associative stigma was positively correlated with some determinants of burnout, which were depersonalization and emotional exhaustion among mental health providers (Verhaegbe & Bracke, 2012). For personal accomplishment, however, they did not find any significant association. Overall, the authors concluded that experiences of associative stigma among the mental health providers were rather low ($M = 1.74$, $SD = 0.84$) in comparison to the mean score ($M = 29.99$, $SD = 8.64$) for associative stigma in this study (Verhaegbe & Bracke, 2012).

African immigrant nurses may have experiences of associative stigma, which have consequences on their well-being, work experiences and the quality of care they provide. There are multiple types of stressors affecting this group and their burnout risk. For instance, being an immigrant has its own stressors, and working in healthcare is also stressful (Yang et al., 2015). African immigrant providers may have internalized stigma or self-stigma about being an immigrant and about race; this may have increased or compounded associative stigma, and its corresponding relationship with burnout. Increased internalized stigma or self-stigma may have resulted in these African immigrant nurses having more discriminatory behaviors towards the people they served, which may also decrease the quality of care they provided.

Associative stigma may also derive from colleagues and create more stressful and negative working conditions (Picco et al., 2019). Participating African immigrant nurses may not have felt supported, did not feel part of a team, or may not have been unwilling to communicate

or ask for help; this might have increased their risk for burnout. Negative work experiences (e.g., aggression, threats, refusing treatment) with patients with mental illness in any setting may have increased stigmatized views their providers had; the difficult work of patient care may, then, in turn influence burnout (Picco et al., 2019). Finally, mental illness stigma might be a signal that nurses have had difficult or poor work experiences with patients with mental illness in the past.

My study found that stigma-related drivers of occupational burnout among African immigrant nurses included both associative stigma and mental illness stigma. The detrimental consequences of associative stigma among African immigrant nurses may spill over to their patients in the form of mental illness stigma. This 'dual stigmatization' phenomenon has been noted among people with mental illness (West et al., 2018). Future studies should further examine the relationship between the two types of stigma and how they interact to affect occupational burnout. Other factors associated with burnout among immigrant nurses (e.g., working conditions, experience of racism or discrimination) should be simultaneously considered to identify the most important drivers of burnout for targeted interventions. Ensuring optimum quality of care for individuals with mental illness also deserves attention in future research.

There have been several limitations to this study. As with other studies that explored relationships between associative stigma and occupational burnout, this study's design was cross-sectional. Thus, causation could not be established between these two variables. Because of the sampling strategies selected to recruit from a small population, the findings could not be generalized to all African immigrant nurses or nurse practitioners. Representation from California may be over-weighted in the sample because of purposive sampling, and data were self-reported, which introduced risk for response bias. However, considering that overall,

participants were recruited from all over the United States and have been involved in the care of patients with mental illnesses, valuable insight and baseline data for this population could be drawn from this study and used to inform future research. Replication of this study in wider contexts noted in this discussion would be needed for better generalizability.

Conclusion

This study explored associative stigma and burnout among the African immigrant nurses. The few existing studies of these topics have been previously conducted in Asian and Western countries, and my research expanded the research literature by confirming the relationship of associative and mental illness stigma to occupational burnout among African immigrant nurses. The impact that associative stigma outcomes may have on patients and their families also needs to be further explored in research, as associative stigma may be one of the mechanisms by which negative stereotypes, prejudice and discrimination towards people with mental illnesses are perpetuated. Furthermore, policy should be explored to better support the mental health and well-being of African immigrant nurses in the United States to combat experiences of associative stigma.

Tables

Table 8

Sample Participant Characteristics

Characteristic	*n* (%)	M (SD)
Gender		
Male	56 (76.7)	
Female	17 (23.3)	
Years of Experience		
Less than 1 year	1 (1.4)	
1–5 years	22 (30.1)	
6–10 years	10 (13.7)	
Greater than 10 years	40 (54.8)	
Age (years)		47.19 (10.09)
Age at migration		26.46 (8.73)
Years since migration (years)		20.42 (9.51)
Stigma towards mental illness		30.22 (7.12)
Associative stigma		29.99 (8.64)
Acculturation		76.92 (0.97)
Occupational burnout score		47.07 (12.55)

Note. Nurses and nurse practitioners (n = 73) who participated in an online survey of mental illness stigma among African immigrant healthcare providers. M = mean, SD = standard deviation. *p < 0.05, **p < 0.01, ***p < 0.001

Table 9

Comparison of Stigma/Associative Stigma of U.S.-Based African Immigrant Nurses and Occupational Burnout Score by Demographics

Outcome	Factor		M (SD)	Statistic (*p*-value)
Stigma of U.S.-based African immigrant nurses	Gender	Male	31.29 (6.28)	0.71 (0.48)
		Female	29.89 (7.38)	
	Years of nursing experience	Less than 1 year	39.00 (0.00)	2.16 (0.10)
		1–5 years	32.82 (7.18)	
		6–10 years	29.10 (7.81)	
		Greater than 10 years	28.85 (6.62)	
Occupational burnout score	Gender	Male	48.94 (15.14)	0.70 (0.48)
		Female	46.50 (11.74)	
	Years of experience	Less than 1 year	52.00 (0.00)	2.46 (0.07)
		1–5 years	52.73 (13.78)	
		6–10 years	46.10 (8.33)	
		Greater than 10 years	44.07 (12.01)	
Associative stigma score	Gender	Male	28.94 (8.90)	–0.57 (0.57)
		Female	30.30 (8.62)	
	Years of experience	Less than 1 year	27.00 (0.00)	1.20 (0.31)
		1–5 years	27.64 (8.75)	
		6–10 years	28.60 (2.59)	
		Greater than 10 years	31.70 (9.40)	

Note. Nurses and nurse practitioners ($n = 73$) who participated in an online survey of mental illness stigma among African immigrant healthcare providers. *M* = mean, *SD* = standard deviation. *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$

Table 10

Relationship Between Occupational Burnout Score and Associative Stigma of U.S.-Based African Immigrant Nurses (Simple Regression and Multiple Regression)

Factors	Model 1: B (SE)	Model 2: B (SE)
Constant	31.97 (5.27)	40.64 (19.41)
Associative Stigma	0.64 (0.21)**	0.61 (0.22)**
Age		–1.24 (0.82)
Gender (Male)		0.70 (3.70)
Female		Reference
Time since Migration		1.20 (0.80)
Age at Migration		1.18 (0.78)
Acculturation		–0.11 (0.18)
Experience (<1 year)		1.83 (12.58)
Experience (1–5 years		6.72 (4.04)
Experience (6–10 years)		0.31 (4.31)
Experience (>10 years)		Reference
R-square	0.11	0.22
F-statistic	8.82**	1.90

Note. Nurses and nurse practitioners (n = 73) who participated in an online survey of mental illness stigma among African immigrant healthcare providers. Standard Errors (SE) appear in parentheses, Outcome: Occupational Burnout score. *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$

Table 11

Relationship Between Occupational Burnout Score and Stigma of Mental Illness Among U.S.-Based African Immigrant Nurses (Simple Regression and Multiple Regression)

Factors	Model 1: B (SE)	Model 2: B (SE)
Constant	29.02 (6.10)	41.65 (20.05)
Stigma toward Mental Illness	0.60 (0.20)**	0.47 (0.21)*
Age		–1.01 (0.83)
Gender		0.17 (3.78)
Female		Reference
Time since Migration		1.00 (0.81)
Age at Migration		0.96 (0.80)
Acculturation		–0.12 (0.19)
Experience (<1 year)		2.87 (12.84)
Experience (1 to 5 years)		6.06 (4.18)
Experience (6 to 10 years)		0.71 (4.39)
Experience (>10 years)		Reference
R-Square	0.12	0.19
F-statistic	9.23**	1.56

Note. $n = 73$; Standard Errors (SE) in parentheses, Outcome: Stigma towards people with mental illness among U.S.-based African immigrant nurses, $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

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Chapter 5: Discussion and Conclusion

This dissertation explored the associations between two different types of stigma and occupational burnout among African immigrant nurses. This is the first research I know of to investigate these associations among African immigrant settings in the United States. The study featured three specific aims: to determine whether there was a relationship between the demographic characteristics of U.S.-based African immigrant nurses and stigma towards individuals with mental illness; to examine the relationship between the level of associative stigma experienced by African immigrant nurses and stigma of people with mental illness; and lastly, to examine a potential correlation between the associative stigma of U.S.-based African immigrant nurses and occupational burnout. These study objectives were initially explored through an integrative literature review of the stigmatization of mental illness among healthcare providers in Africa and other developing regions of the world. The findings from the review supported a quantitative study to explore the relationship between stigma and associative stigma toward people with mental illness in a sample of 73 African immigrant nurses, and occupational burnout.

The first aim of this study was to determine whether there was a relationship between the demographic characteristics of U.S.-based African immigrant nurses and stigma towards individuals with mental illness. I found a nonsignificant trend in the association between the age of African nurses and stigma towards individuals with mental illness in this study. In contrast to the findings of a previous study conducted in Africa by Adjorlolo et al. (2018), which found increased stigma among nurses with six years of nursing experience or more, compared to nurses with five years of nursing experience or less, in the current study, African immigrant nurses with

five years of nursing experience or less expressed significantly more stigma towards patients with mental illness as compared to nurses with at least ten years of nursing experience. The contrast in findings between the research conducted in Africa, and this study conducted in the United States, raises questions about cultural influences, healthcare systems, and the dynamics of nursing professional experience regarding knowledge, openness, and sense of security when encountering people with mental illness (Martensson et al., 2014). These disparate results are suggest that there are other factors, such as cultural perceptions of mental illness, or organizational practices that may be at play (Martensson et al., 2014). African countries grapple with significant challenges in mental health infrastructure and resources that are available in the United States (Reuter et al., 2016). Also, the stigma of mental illness is highly pervasive in Africa, often stemming from deep-rooted supernatural beliefs and misinformation about afflictions, possession by evil spirits, or being a victim of witchcraft (Makanjuola et al., 2018). With these considerations, nurses who have spent a considerable number of years working may have lost interest in or sensitivity to people with mental illness, especially if they have not had adequate training or support to deal with these problems.

In contrast, the findings of the current study, conducted in the United States, paint a different picture. Nurses with five years of nursing experience or less displayed increased stigma towards people with mental illness, compared to their better-experienced counterparts. These results aligned more closely with the explanation that new nurses may not be given appropriate onboarding when starting a job in mental health or because of associative stigma from peers in other specialties and from the public.

For the second aim, I hypothesized that higher associative stigma among the African immigrant nurses would correlate with increased stigma towards people with mental illness. The

findings from my analyses did not reflect an association between these two stigma types. Possible explanations for this result were: (1) the sample size was not large or diverse enough to detect significant associations between stigma towards mental illness and associative stigma experiences of African immigrant nurses; (2) the participants were mostly from one urban area, which may not have represented experiences of African immigrant nurses in more rural areas; and (3) the fact that both registered nurses and nurse practitioners were included may have affected the results, as nurse practitioners in advanced roles may experience less associative stigma.

The last aim examined whether there were correlations between stigma towards people with mental illness, associative stigma experiences and occupational burnout experienced by African immigrant nurses. My results showed that African immigrant nurses who experienced higher levels of associative stigma also had higher levels of occupational burnout. This relationship persisted when demographic covariates were included in the analysis. These results highlighted the interconnectedness of professional perceptions and well-being within the nursing workforce. This dual stigmatization has implications not only for the quality of care for patients but also the emotional health of the nurses. Occupational burnout among nurses is a pervasive issue that has garnered increasing attention in recent years. Characterized by emotional exhaustion, depersonalization, and reduced personal accomplishment, burnout can have serious consequences for each of the nurses and for the organizations where they work (Zaninotto et al., 2018). High levels of burnout are associated with increased absenteeism, reduced job satisfaction, and turnover, with a consequent effect on patient safety and quality of care (Audu et al., 2019; CDC, 2023). The American Nurses Association (ANA) also reported the severity of nurse burnout and its consequences for nurses and their patients, highlighting the early signs of

nurse burnout as feeling constantly overworked, mental disconnection from the job, feeling unappreciated on the job, tension in the body, and even feelings of depression (ANA, 2024).

Given the relationship between stigma towards people with mental illness and occupational burnout, addressing stigma types in the nursing profession is more than enhancing patient-centered care; it is worth for promoting the well-being of nurses themselves. In practice, nurses who manifest stigmatizing behaviors such as stereotypes, prejudice, and discrimination are likely to experience heightened stress levels, and moral distress (Chang et al., 2019). These feelings and experiences create burnout that undermines the overall resilience and efficacy of the nursing workforce.

The significant positive correlation between associative stigma and occupational burnout among African immigrant nurses in this study underscored the importance of addressing and mitigating this issue. Associative stigma refers to the phenomenon where individuals experience stigma due to their association with a stigmatized group, even if they do not possess the stigmatized characteristic themselves. In the context of immigrant nurses, associative stigma can be compounded by experiencing self or internalized stigma related to their ethnicity, nationality, or immigration status, which could have significant implications for their mental health and well-being. To reduce associative stigma and occupational burnout in this population, there are strategies that touch on organizational culture, such as providing educational programs aimed at raising awareness about associative stigma and its impact on individuals within the healthcare system. Cultural competency training for healthcare providers could be implemented to promote understanding and sensitivity towards the experiences of immigrant nurses. This training could help colleagues and supervisors recognize and address stigmatizing behaviors in the workplace. Mentorship programs that pair immigrant nurses with experienced mentors could also be

established in nursing units. The better-experienced nurses could offer guidance, support, and advocacy within the workplace and possibly help navigate challenges related to associative stigma and discrimination among peers. These interventions should be investigated in future research and is congruent with the CDC (2023) report about how helpful supervision could improve the working climate of an organization, foster trust in management and indirectly reduce burnout.

Above all, self-care practices among nurses could be promoted in the workplace to help them cope with stress, combat burnout, and maintain overall well-being (ANA, 2024). By implementing these strategies, healthcare organizations and policymakers could work towards reducing associative stigma and creating a more inclusive and supportive environment for all nurses. This will not only benefit the individual nurses but will also contribute to improved patient care and outcomes.

In conclusion, the relationship between stigma towards people with mental illness and nursing experience may differ across contexts; however, this study's results highlighted the complex interplay of cultural, institutional, and individual factors that influence perceptions of stigma within the nursing workforce. Challenging the dual stigmatization that exists in the American mental healthcare system and addressing stigma will help create supportive work environments that prioritize psychological safety, peer support, and self-care that could mitigate the risk of burnout and promote the well-being of nurses. When nurses are satisfied with their jobs, associative stigma experiences will be reduced, and stigma toward the patients will also decrease. Interventions that will reduce these stigma types require a multifaceted approach that acknowledges and addresses these diverse influences.

Limitations of Study

In this study, the use of a self-report cross-sectional survey to collect data from African immigrant nurses limited the generalizability of the findings and limited the ability to draw any definitive conclusion. The results were limited to the sample and could not be generalized for all U.S.-based African immigrant nurses. The sample size might have accounted for the inability to detect some associations between the dependent and independent variables. The sampling methods I used in this study also involved social media and snowball sampling methods, which were subject to bias.

Future Research

Future research that involves a larger sample size, and the use of qualitative methods to complement quantitative findings could provide a deeper insight into the lived experiences of African immigrant nurses and their patients within this context of dual stigmatization. Cultural nuances influencing both types of stigma may also provide a better understanding of how stigma operates. Longitudinal studies may provide insights into the dynamic nature of stigma and its potential changes throughout a nurse's career. An intervention study could evaluate antistigma evidence-based interventions that could be beneficial to practicing mental health nurses.

Significance of Study

The new knowledge generated from this study has a potential to benefit mental health and occupational health nursing research. My study on African immigrant nurses may help guide future research on dual stigmatization and provide targets of intervention for better quality of care for individuals with mental illness. The well-being of African immigrant nurses could also be improved by interventions that may decrease associative stigma. It will be helpful to review existing organizational policies to identify any discriminatory practices or systemic barriers

contributing to associative stigma. Moreover, strict enforcement mechanisms and consequences should be implemented for behaviors that perpetuate stigma, to ensure accountability at all levels. And for continuous improvement, regular assessment of the effectiveness of implemented policies can be achieved through surveys, focus groups, and performance metrics. Feedback should be obtained from healthcare professionals to identify areas for improvement to make necessary adjustments to policy frameworks accordingly.

For these reasons, nurses could support policies that promote healthy workplaces, such as *Healthy Nurse, Healthy Nation*, as described by the ANA, and the *Total Worker Health Program* by the CDC, which in turn could promote the health and well-being of African immigrant nurses, as well as of mental health nurses in general.

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