

Southern Illinois University Edwardsville

SPARK

Doctor of Nursing Practice Projects

School of Nursing

Winter 12-16-2022

Empowering Nurses to Recognize Post-Stroke Depression in the African American Community

Deidra Frisbie

Southern Illinois University Edwardsville

Robin Simon

Southern Illinois University Edwardsville

Follow this and additional works at: <https://spark.siu.edu/dnpprojects>



Part of the [Interprofessional Education Commons](#), [Mental Disorders Commons](#), [Neurology Commons](#), [Neurosciences Commons](#), [Psychiatric and Mental Health Nursing Commons](#), and the [Quality Improvement Commons](#)

Recommended Citation

Frisbie, Deidra and Simon, Robin, "Empowering Nurses to Recognize Post-Stroke Depression in the African American Community" (2022). *Doctor of Nursing Practice Projects*. 238.

<https://spark.siu.edu/dnpprojects/238>

This DNP Project is brought to you for free and open access by the School of Nursing at SPARK. It has been accepted for inclusion in Doctor of Nursing Practice Projects by an authorized administrator of SPARK. For more information, please contact tdvorak@siue.edu.

Executive Summary

African Americans have nearly twice the risk of stroke, suffer the highest death rate secondary to stroke, are four times more likely to have a stroke between the ages of 45 and 54, are 60% more likely to have another stroke within 90 days, and suffer from more severe strokes and slower rehabilitation in comparison to European Americans. Post-stroke depression (PSD) is a common complication of stroke that worsens stroke outcomes but remains under-recognized and underdiagnosed in the African American community. Early assessment, detection, follow up and connection with the appropriate resources could potentially improve stroke recovery, morbidity, and mortality in this community (Ogunlade et al., 2020).

Literature Review

Post-Stroke Depression (PSD) is one of the most common complications of a stroke, affecting approximately one-third of all stroke victims. PSD leads to higher rates of mortality, morbidity, stroke recurrence, cognitive deficits, long-term disability, and lower quality of life (Lopez-Espuela et al, 2020; Lee et al., 2021). The consequences of PSD are well-known, but it continues to be underdiagnosed in the African American (AA) community. This may be due to multiple factors, including subtle differences in symptomatology and presentation of depression by AAs (African Americans), causing providers to miss opportunities to diagnose PSD in this community (Jacobs & Ellis, 2021; Akinyemi et al., 2018, Saucedo et al., 2021). AAs experience higher rates of stroke, death secondary to stroke, stroke recurrence, earlier onset, greater debility, and slower rehabilitation (Adams et al., 2018, Boehme et al., 2017; CDC, 2021; Kamel et al., 2020). Ultimately, the lack of early recognition and treatment of PSD, leads to even worse post-stroke outcomes in the AA community compared to those without PSD (Jacobs & Ellis, 2021; Ogunlade et al., 2020).

Nurses are in a unique position to help improve outcomes associated with PSD in the AA community, but barriers such as knowledge, skill set, attitudes, and experiences may leave them poorly prepared to facilitate communication (McGilton et al., 2017; Turner et al., 2018). Lack of understanding of nursing bias (especially implicit bias), comfortability, and humility can cross racial lines increasing barriers to holistic care, quality care, culturally appropriate care, and therapeutic relationships (Groves et al., 2021; Joo et al., 2020). By empowering nurses with an understanding of cultural humility and implicit bias, there is potential to improve work satisfaction, improve patient satisfaction, and reduce the rate of under-recognized PSD, leading to early intervention and improved outcomes in the AA community (Zinan et al, 2021; Figueroa, 2019).

Project Methods

The main purpose of this project was to improve the recognition and diagnosis of PSD in African American stroke survivors. A secondary purpose was to provide adjunct materials that patients could utilize to identify their symptoms of PSD then seek medical attention.

The intention was to educate nurses about the subtle differences in PSD presentation in the AA community, thereby precipitating early diagnosis, treatment onset, and improvement of post-stroke depression outcomes. After a discussion with the facility stakeholder regarding the identified problem and need, permission to implement at the site was granted. Once IRB approval was awarded, multiple meetings with the stroke advisor, psychiatry advisor, and stroke nurse navigators were conducted to discuss the goals and possible outcomes of the project.

During implementation, education, including statistics of stroke in the AA population, cultural competence, cultural humility, implicit bias, and the role of nursing, along with a pre- and post-education test, was provided to nurses, stroke nurse navigators, and supporting nursing

staff, on the Neurology floor at a Comprehensive Stroke Center. The validated PHQ-2 depression screen, a psychiatry provider list, and a mHealth app (MoodTools with a QR code) were provided to stroke patients. Implementation was over 30 days.

Evaluation

Before the project implementation, pre-education tests were placed on the unit for nurses to take and were provided to nurse(s) who had not previously taken the test. The tests were placed in three high-trafficked locations on the unit. A PowerPoint presentation was provided utilizing laptops and presentation scripts. Post-education tests were provided to the nurses. Post-education test questions utilized the same questions as the pre-education test. This was done to allow the nurse(s) to immediately see educational progress and to assure that the education provided was sufficient. A question-and-answer discussion followed post-education testing. The stroke nurse navigators were educated on the same day.

The education provided covered stroke statistics, post-stroke depression and incidence in the African American population, possible reasons for under-recognition and diagnosis in the African American community, cultural humility and implicit bias, and the nurses' role in PSD identification. Due to the heightened interest in understanding personal implicit bias, cards with the Harvard University Implicit Project website were made and then placed in the same three locations of the unit. Nurses were encouraged to visit this website at their convenience, with the intention that understanding personal implicit bias could inform and improve the care that they provide to all of their patients.

Halfway through implementation, the stroke nurse navigators were provided with additional post-stroke discharge follow-up questions to ask patients during the 7 and 30-day follow-up phone calls. Multiple education sessions took place for two weeks. DNP (Doctor of

Nursing Practice) candidates were available for education during day and night shifts. At the conclusion of implementation, post-implementation surveys were placed on the unit and retrieved after two weeks.

The number of participants was small (n=18), and the implementation was targeted toward the nurses working on a busy Neurology unit. Mean scores of the pre-and post-education test were compared to determine if knowledge was increased. Data was gathered by utilizing pre-/post education tests for nurses, post-implementation surveys for nurses, and post-stroke discharge follow-up questions for patients. Out of the abundance of respect for the time of the nurses on this busy unit, the post-implementation survey was composed of simple, close-ended questions to examine the utilization of the information provided during the education, practicality, and comfortability.

Qualitatively, based upon the review of the pre-and post-test questions, comparison of the most frequently missed questions, and discussion/question and answer session with the participating nurses, the education provided was successful. Quantitative analysis demonstrated that the mean score of the pre-education test was 56%; the mean score of the post-education test was 95%. There was a 59% increase in recipient knowledge after the education was provided, in comparison to pre-education. One hundred percent of the post-implementation surveys demonstrated the use of the knowledge gained during implementation, greater understanding of symptom presentation of depression in the African American community, increased comfortability discussing post-stroke depression, and the belief that the ability to offer the mHealth application and physician list was helpful.

Limitations of this project included a high census of travel nurses, a busy unit with a high turn-over patient population, stroke unpredictability, varied level of therapy needs, length of

admission, small sample size, limited time of implementation, lack of 30-day post-stroke follow up data, only three African American patients received a seven day follow up call.

Strengths of this project included a high census of travel nurses, some being international, all of these nurses can take the knowledge with them, high staff engagement, strong, stroke nurse navigator by-in, reported, positive experiences by staff and increased confidence while utilizing the knowledge gained, continued use of the provider list and mHealth app, after completion of implementation and currently, the potential of adding the mHealth QR code to the permanent stroke education book that is provided to all stroke patients.

Impact on Practice

Immediately, at the onset of grading, it was clear that most of the participating nurses believed that implicit bias was racism, precisely 83%. This was the second most missed question on the pre-education test. This finding was concerning because if nurses believe that having implicit bias is the same as being racist, there may be inherent resistance toward learning about personal bias, furthermore, how that bias may impact the care that they provide. Defining implicit bias and encouraging nurses to understand their own biases will improve the care they provide and allow them to commit to cultural humility. Overall, nurses learned it is safe and necessary to know their biases, as knowing them will improve the care they provide to all their patients.

Moving forward, education about cultural humility as an expansion of cultural competency and understanding implicit bias should become a part of the nurse onboarding curriculum; also, there should be a consideration for the addition of this education to the annually required computer-based learning schedule for nursing and other patient care disciplines. Awareness of personal bias should be intentional and considered an important objective in the

progression toward truly holistic nursing care, in an environment where so many people of different races, ethnicities, cultures, sexual orientations, and faiths come for treatment and healing.

Conclusion

African Americans (AA) have the highest prevalence of stroke and death compared to other racial groups in the United States. Post-stroke depression is underdiagnosed in this community leading to even worse stroke outcomes. This project aimed to assist nurses in the identification of PSD in the African American community, by providing education about depression expression in this community, cultural humility, and implicit bias; along with being able to provide patients with a provider list and mHealth QR code. Unfortunately, increased identification of PSD with the utilization of the mHealth app and provider list was not realized.

What was realized was an increase in confidence to discuss PSD with all patients, an improved understanding of the subtle differences in depression expression in the AA community, the role of cultural humility in recognizing those differences, and the understanding that implicit bias is not racism.

Author Contact Information

Deidra Frisbie RN, MSN, APRN, FNP-C, frizy6@gmail.com

Robin Simon APRN, FNP-BC, icu_rn25@yahoo.com