

# Knowledge of Stroke Signs and Symptoms Among Residents in a Rural South Eastern Nigerian Community

Felix E. Chukwudelunzu, MD, MBA, FAHA, FANN,\*  
Virginia U Okwu-Delunzu, PhD,<sup>†</sup> and John Dzissah, PhD<sup>‡</sup>

**Background:** Stroke is a global epidemic. Treatment is predicated on recognition of its signs and symptoms. **Materials and Method:** We collected data from 182 participants at a local 2017 health fair in Adu-Achi, Oji-River local government area, Enugu State in South Eastern Nigeria. Demographic data of age and gender, knowledge of 2 or more stroke signs or symptoms, and educational level were collected. The data from 31 (17%) subjects were incomplete and excluded from the final analysis. Statistical analysis was conducted to determine the relationship between the knowledge of  $\geq 2$  stroke symptoms and signs to age and education using Logistic and chi-square methods, respectively. **Results:** A total of 151 eligible participants for analysis consisted of 121 (80.1%) females with a mean age of 56 ( $\pm 14$  years) and age range of 20-85 years. Majority of the participants, 149 (98.7%) were unable to name 2 or more stroke signs or symptoms. Majority of the subjects, 137 (90.7%) attained highest education of elementary school. Postsecondary school education correlated with knowledge of 2 or more stroke signs and symptoms. **Conclusion:** Knowledge of stroke signs or symptoms is poor among the inhabitants of this rural South-Eastern Nigeria with highest educational attainment of elementary school as represented by this cross-sectional population study. The need to increase education and awareness of stroke in rural communities in South Eastern Nigeria is critically needed.

**Keywords:** Stroke—signs and symptoms—knowledge—Rural Nigeria community  
© 2018 National Stroke Association. Published by Elsevier Inc. All rights reserved.

## Introduction

As in many developing countries, Nigeria health services focus on combating infectious diseases such as malaria, but noncommunicable conditions have become an increasing problem. Hypertension, one of the most prevalent noncommunicable disease world-wide is responsible for an estimated 51% of death due to stroke.<sup>1</sup> According to World Health Organization 2012 burden of disease statistics, stroke is the #8 cause of death in Nigeria.<sup>2</sup> It is also responsible for up to half of all neurological admissions and 5%-17% of medical death in some of our tertiary care medical centers.<sup>3</sup> A 2012-2013 population based survey in Uganda, showed that nearly 75% of the respondents did not know any warning signs of stroke

and did not recognize the brain as the organ affected by stroke.<sup>4</sup> A tertiary health care institution in a metropolitan city in Nigeria, found that among stroke survivors, about 27% have no knowledge of any stroke symptoms or signs.<sup>5</sup> Effective management of stroke depend largely on public knowledge of stroke warning signs. Studies assessing knowledge of presenting signs and symptoms of stroke in rural Nigerian community is lacking. This study therefore sought to bridge this knowledge gap.

## Material and Methods

This was a community based cross sectional study of adults attending a one day health fare in Adu-Achi, Oji-River

From the \*Department of Neurology, Mayo Clinic Health System, Eau Claire, Wisconsin; †Department of Geography and Meteorology, Faculty of Environmental Science, Enugu State University of Science and Technology, Enugu, Nigeria; and ‡Department of Operations and management, University of Wisconsin-Stout, Wisconsin's Polytechnic University, Wisconsin.

Received May 18, 2018; revision received July 16, 2018; accepted July 20, 2018.

Grant Support: None.

Address correspondence to Felix E Chukwudelunzu, MD, MBA, FAHA, FAAN, Department of Neurology, Mayo Clinic Health System, Eau Claire, WI 54703. E-mail: [chukwudelunzu.felix@mayo.edu](mailto:chukwudelunzu.felix@mayo.edu)

1052-3057/\$ - see front matter

© 2018 National Stroke Association. Published by Elsevier Inc. All rights reserved.

<https://doi.org/10.1016/j.jstrokecerebrovasdis.2018.07.038>

## NZE CHUKWUDELUNZU MEMORIAL FOUNDATION FOR HEALTH



## BLOOD PRESSURE, CHOLESTEROL AND DIABETES SCREENING PROJECT ADU-ACHI: APRIL 2017

<b>SCREENING REGISTRATION FORM</b>
------------------------------------

Name: \_\_\_\_\_

Date: \_\_\_\_\_

DOB/AGE: \_\_\_\_\_ / \_\_\_\_\_

 Male     Female    Height: \_\_\_\_\_ (cm)    Weight: \_\_\_\_\_ (Kg)

BP: \_\_\_\_\_ / \_\_\_\_\_    FBS: \_\_\_\_\_    Total Cholesterol: \_\_\_\_\_

Hx/o HTN:     Yes     No     I don't know    Get regular checkup     Yes     NoHx/o DM:     Yes     No     I don't know    Get regular checkup     Yes     NoName 2 signs of Stroke:     Yes (able to name 2)     No (Don't know or unable to name 2)Education:     Elementary     Secondary School     Post-secondary School     University     Post-University**CONSENT AND REALEASE FOR BLOOD GLUCOSE AND CHOLESTROL SCREENING**

- I attest that the demographic information provided above is correct to the best of my knowledge
- I understand that a blood sample must be obtained by pricking my finger for the purpose of measuring my blood glucose and cholesterol
- I am participating voluntarily, and I understand that the risk associated with the testing may include but is not limited to sore finger, mild to moderate discomfort, mild bleeding and or possible infection.
- I authorize the foundation or its organizers to maintain a copy of my test results, and to release them to my physician or other third parties, when necessary to advance my health needs
- I also authorize the release of my demographic information and photographs taken (if any) at this event for educational purposes or for any other purposes associated with the charitable work of the foundation
- I indemnify the foundation, its organizers and all persons associated with this screening from any and all claims from my voluntary participation at this event

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Figure 1. Data abstraction sheet

Local Government Area of Enugu State, South-Eastern Nigeria. Adu-Achi is a rural community with a population of about 9000<sup>6</sup> and estimated annual income of 50,000 naira (₦50,000) per person.<sup>7</sup> Public announcement were made at the local church, which serves as the main focal point of

dissemination of information for the town, words of mouth, and flyers. Invitation to the health fare was open to all adult residents of the town with the following inclusion criteria for participation; bona fide residents of the town, 18 years of age or older and willingness to participate in the screening by

Download English Version:

<https://daneshyari.com/en/article/11010579>

Download Persian Version:

<https://daneshyari.com/article/11010579>

[Daneshyari.com](https://daneshyari.com)