

**Sigma's 30th International Nursing Research Congress**  
**The Complexity Around Stroke Awareness and Management in the Hispanic Community**  
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Stroke is the fifth leading cause of death in the United States (US), claiming the lives of more than 130,000 Americans each year (CDC, n.d.). According to the American Heart Association/American Stroke Association, each year approximately 795,000 people in the United States experience a stroke with the large majority of these cases as new strokes and close to 185,000 are recurrent strokes (Mozzafarian, 2016). Every 40 seconds someone in the United States experiences a stroke. Stroke is the leading cause of serious long-term disability in the United States, affecting more than four million Americans (Hinojosa et al., 2009).

In a statistic fact sheet developed by the American Heart Association/American Stroke Association, population projections show that by 2030, an additional 3.4 million US adults aged ≥18 years will have had a stroke which is a 20.5% increase in prevalence from 2012 (2017). The highest increase is projected to be in Hispanic men at 29%. The report indicates that Spanish-speaking Hispanics are less likely to know all stroke symptoms than English-speaking Hispanics, non-Hispanic blacks, and non-Hispanic whites with lack of English proficiency strongly associated with lack of stroke knowledge among Hispanics.

Hispanic Americans are the largest minority population in the US with Mexican Americans the largest subgroup at 63% of the total (Morgenstern et al., 2014). In 2010, 50.5 million Hispanic Americans composed 16% of the US population which is expected to grow to 50% of the US population by 2060. Over the years there have been numerous campaigns and public service offerings to educate the community on the signs and symptoms of stroke and the urgency to seek medical attention if experiencing any change in neurological status. The community education efforts have contributed to stroke deaths decreasing from the third leading cause of death in 2008 to its current rank as the fifth leading cause of death in the United States in 2016. Despite the community outreach education programs and social media campaigns, there are still delays in people seeking medical care when experiencing signs and symptoms consistent with the diagnosis of stroke. These delays result in the inability of the person to receive the time sensitive treatment available to minimize or eliminate the disabilities associated with stroke.

Getting to the root cause of the delay in recognizing stroke symptoms and accessing the healthcare systems has been difficult. Hispanics presented less frequently to primary stroke centers for a variety of reasons which include inability to access healthcare for financial or legal reasons, mistrust, misunderstanding of the healthcare system, poor communication, lower income and lower education (Aparicio et al., 2015). Targeted and tailored education provided in a church or other culturally appropriate setting that is geared to the culture and uses the strategies of telling stories, providing drama (acting), creating and showing films and discussion of personal experience led to an increase knowledge of stroke and its treatment and in intent to call 911 when surveyed as part of several studies (Williams et al., 2016; Ravenell et al., 2015).

The incidence of strokes in the Hispanic population occurs at a younger age (average age of 67 compared to average age of 80 in non-Hispanic whites) with a higher degree of disability noted and a prolonged survival rate. Given the worse neurological functional and cognitive outcome, prolonged post stroke survival and increased post stroke disability, attention must be focused on the future public health burden of stroke in the growing and aging Hispanic population. A method to lessen the burden of stroke would be to prevent or limit the occurrence of primary (first) stroke and secondary (subsequent) strokes. To prevent or limit the occurrence of primary

and secondary stroke, education on the need to minimize risk factors must be provided in a setting and method to connect with this community.

Risk factors for cardiovascular disease such as diabetes, hypertension, obesity, physical inactivity, hypercholesterolemia and heavy alcohol use are higher in the Hispanic population when compared to the non-Hispanic white population. According to Martinez et al (2016), minority populations are less likely to engage in stroke preventative measures than whites possibly due to unique barriers such as stroke literacy, health locus of control, social support, and healthcare access. Trimble et al (2008) reports that by targeting young Hispanic people at risk with programs to heighten awareness of stroke symptoms and risk factors would not only influence the next generation at risk but also helps to educate their parents and other older family members and friends. There are limited studies available that are specific to stroke prevention in the Hispanic population, most published stroke prevention studies regarding minorities combine Hispanic with African American and focus strongly on the African American subjects.

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**Title:**

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**Keywords:**

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**References:**

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**Abstract Summary:**

The incidence of stroke in the Hispanic population occurs at a younger age with higher disability and a prolonged survival rate. Worse neurological outcome, prolonged post stroke survival and increased post stroke disability demands attention to the future public health burden of stroke in the growing and aging Hispanic population.

**Content Outline:**

Introduction:

Scope and significance of Stroke in the Hispanic population

Background of stroke in minorities

Methods

Review of the literature

Comprehensive data bases reviewed

Number of participants and percentage of minorities involved

Results

Summary of literature review as it relates to

- Barriers to access
- Cultural influence
- Community education

Conclusion

Future direction and study

References

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**Author Summary:** Donna Kruse started her professional nursing career in 1986 and is currently pursuing a PhD in Health Sciences at Northern Illinois University. She has practiced in critical care nursing for over 25 years and has taught critical care nursing and implementation of evidence-based practice and research in nursing. Her current role as the stroke coordinator at Advocate Sherman Hospital has provided her additional skills in quality management, clinical operations and regulatory management.