E-091 STROKE AWARENESS KNOWLEDGE GAP IN WOMEN

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Introduction Understanding current levels of stroke awareness in women may highlight knowledge gaps and areas for targeted education in those most likely to be affected by stroke. The purpose of this study was to evaluate awareness of stroke (i.e. stroke symptoms and risk factors) among women in Orange County. Following baseline assessments in knowledge, educational programs will be implemented as a public health intervention to raise awareness.

Methods An institutional IRB-approved, prospectively collected survey study was conducted among randomly selected English-speaking women, age 18–82 years, throughout a variety of public locations in Orange County, California, between October 2018 to March 2019. Knowledge of stroke awareness was assessed by 6 standardized open-ended questions.

Results A total of 672 women, average age 40.6 ± 16 years, responded to the survey. The majority of the participants knew someone who had experienced a stroke, 67.6% (n=454), yet 30.1% (n=202) of participants were aware of the two types of stroke, ischemic and hemorrhagic. Of the 21% (n=141) who correctly identified modifiable lifestyle factors to decrease the risk for stroke, the majority correctly answered blood pressure control. While, 17.4% (n=117) correctly identified the constellation of common signs and symptoms of stroke, the majority correctly answered slurred speech. Among the age group at highest risk for stroke (>65 years), particular knowledge deficits in the benefits of smoking cessation and adequate diabetes management to decrease stroke risk.

Conclusions These preliminary study results indicate a potential and significant lack of women's knowledge of stroke awareness in the Orange County area, despite a majority of survey respondents having a close connection to a stroke patient. Continuation of this project will provide further information on the current knowledge gaps in stroke awareness and highlight concepts for targeted education for those women at greatest risk of stroke.

Tables 1–3, All values are percentages of respondents within the respective age group.

Abstract E-091 Table 1 Stroke Awareness by Age

	Age, years				
	18–24(n = 103)	25–34 (n=150)	35–44 (n=159)	45–64 (n=177)	>65 (n=59)
Modifiable Stroke Risk Factors	20	29	28	37	27
Warning Signs of Stroke	11	16	18	19	25
Awareness of stroke type (ischemic, hemorrhagic)	16	15	23	25	25
Know someone who experienced a stroke	50	59	69	75	92

Abstract E-091 Table 2 Knowledge of Modifiable Risk Factors by Age

	Age, years				
	18–24(n = 103)	25–34 (n=150)	35–44 (n=159)	45–64 (n=177)	>65 (n=59)
Blood pressure control	78	85	83	85	92
Smoking cessation	70	73	80	82	78
Adequate diabetes management	65	72	67	79	76

Abstract E-091 Table 3 Knowledge of at least a sole stroke symptom among women by age

	Age, years				
	18–24(n = 103)	25–34 (n=150)	35–44 (n=159)	45–64 (n=177)	>65 (n=59)
Warning Sign of Stroke	62	61	72	69	75
Sudden weakness of face	71	70	75	77	80
Sudden weakness of limb	65	79	77	76	83
Slurred speech					

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E-092 BRINGING THE TREATMENT TO THE PATIENT: A SINGLE CENTER MOBILE STROKE UNIT EXPERIENCE

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Every minute saved in treatment saves a patient one day of disability (Meretoja et al., 2014). In January 2017, a community hospital implemented a mobile stroke unit to decrease time to treatment and improve outcomes for the surrounding community. The goal of the mobile stroke unit is to treat patients as quickly, safely and efficiently as possible. In comparison to conventional EMS treatment the mobile stroke unit has demonstrated a 31 minute improvement in time to thrombolytic therapy (N=50). Time is measured from alarm to thrombolytic start. An analysis of data from last known well to treatment the mobile stroke unit demonstrates a 42 minute improvement. Treatment in the 'Golden Hour' is especially important as patients treated within 60 minutes of symptom onset have better outcomes. However, less than 1% of patients are treated within the 60 minute timeframe (Ebinger et al., 2015). In the mobile stroke unit, 29% of patients are treated within 60 minutes of symptom onset compared to 7% in the Emergency Department. The goal of improving time to treatment is improving functional outcomes. Sixty-nine percent

of mobile stroke unit patients achieve a good or excellent outcome (modified Rankin scale of 0–2). Additionally, 44% of stroke patients treated in the mobile stroke unit return to a pre-stroke baseline compared to 36% in the Emergency Department. There is no increase in mortality rates in the mobile stroke unit group compared to Emergency Department treatment. Symptomatic hemorrhagic transformation rate is 0% compared to 5% in the Emergency Department. In conclusion, the mobile stroke unit has demonstrated a time to treatment benefit. Additionally, there has been an increase in treatment within the 'Golden Hour'. There has been no increase in mortality or complication rates.

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E-093 GEOGRAPHICAL VARIATION IN THE DECISION TO PROCEED WITH ENDOVASCULAR TREATMENT UNDER 'CURRENT' AND 'IDEAL' SETTINGS

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Background In light of multiple trials showing efficacy of mechanical thrombectomy with highest level of supporting evidence, limited information is available on how treating physicians around the world make decisions in real-life regarding patient selection for (EVT). Regional differences exist where for the same patient presentation and attributes, the decision to treat endovascularly could differ based on local practice and resource settings. In this study we sought to determine the effect of regional and country specific factors on endovascular treatment and how those decisions could differ in a simulated 'ideal' setting if resources were not to be constrained.

Methods We conducted a multidisciplinary survey of Neurosurgeons, Neurointerventional Radiologists, Neurologists, and other clinicians involved in acute stroke care around the world in an effort to understand prevailing approaches in management of stroke using a case-based approach (n=603 from 38 countries). The participants were presented with 10 randomly assigned cases with varying patient characteristics. Respondents were asked which treatment they would select for each patient in their 'current' practice setting versus 'ideal' conditions. The rate of EVT selection was calculated and compared across different world countries. The propensity to add EVT under 'ideal' conditions were compared across geographic regions taking into account physician age, experience, specialty, and academic practice setting.

Results In the case scenarios 75.5% of the respondents proceeded with EVT under 'current' practice setting and were stratified into 7 geographic regions (6070 responses). Regions with relatively lower than average positive rates in proceeding with EVT were South America (58% n=24) and South Asia (60.5% of n=24), compared to 78% global. Average age of the treating clinicians in South America was 37.3 versus 44.8 global average (H=373.6; p<0.001) which reflected number of years in practice 9.4 vs. 14.2 yrs

Abstract E-093 Figure 1