

## Background & Significance

The South Asian (SA) immigrant population is a fast growing minority in the United States. As per the 2010 census, with approximately 200,000 South Asian residents, New Jersey has the third largest statewide population of SA in the US and one of the highest proportions (2.3%) of SA residents in the country.(1,2)

Considerable scientific evidence exists that SA are burdened with significant morbidity and mortality associated with chronic and costly diseases including Cancer, Coronary Heart Disease (CHD), Diabetes, and Infectious diseases. Growing evidence suggests that SA are more susceptible to CHD because of a combination of traditional, novel, cultural and genetic risk factors. (3)

Stroke, a major complication of CHD and Diabetes, is the leading cause of serious long term disability in the US that costs an estimated \$38.6 billion each year. (4) Studies in SA diaspora have shown a higher prevalence and incidence of stroke among SA as compared to Caucasians. A study conducted by Gezmu et al. concluded that SA have a stroke risk comparable to that of African Americans and worse than Hispanics despite being a decade younger than white patients, having more college education, and residing in neighborhoods with the highest median incomes. In addition, they also had the highest levels of fasting blood glucose and blood pressure measurements compared to all other racial/ethnic groups. (5)

Immediate medical attention and intervention is a key factor in the prevention of long term disability and survival in stroke patients. However, awareness about causality, recognition of stroke signs and proper medical attention are all lacking in the general population and in ethnic populations at the highest risk. (6) Despite increasing calls for CHD prevention efforts to be targeted to minorities, few CHD/stroke prevention efforts are directly targeting the SA group. The SA population lacks awareness of acute stroke symptoms, the appropriate response to improve outcome and the availability of healthcare resources for stroke patients. There is a critical need for culturally tailored stroke prevention education programs the SA community.

To address this need, from November 2013-June 2014, **The South Asian Total Health Initiative (SATHI)** developed and implemented a culturally tailored stroke prevention program for the SA community residing in Central New Jersey.

## Goals & Objectives

### Goals:

- 1) Educate participants to recognize symptoms and signs of stroke
- 2) Promote exercise and stress relief through meditation
- 3) Promote heart healthy cooking and diet in the South Asians
- 4) Increase awareness about stroke prevention among participants
- 5) Develop “peer health coaches” in the community

### Objectives:

- 1) To develop a culturally-tailored Stroke prevention curriculum
- 2) To raise awareness about stroke prevention & management
- 3) Encourage the SA community to make lifestyle changes
- 4) To recruit ‘ peer health coaches’ from amongst the participants
- 5) To evaluate the effectiveness of the intervention

## Program Design

**SATHI** Stroke Prevention Education was conducted in settings that were easily accessible to the SA Community. The curriculum was delivered in the two most commonly spoken SA languages, Hindi and Gujarati. Four groups (10-15 people/session) of community members of SA ethnicity (age group 35 - 75 years) were educated . Each group went through a special curriculum (3 sessions) of Stroke Prevention Education developed by SATHI:

### Session 1:

- Participants were given a pre-test to evaluate their knowledge of stroke such as recognition of stroke, rapid intervention, and risk factors.
- A didactic education session addressing stroke signs, stroke recognition and intervention was conducted.
- Health screening was done to collect blood pressure, weight, waist circumference, and BMI.
- Participants were directed to calculate their risk of stroke using a modified stroke risk calculator.

### Session 2:

- Participants watched a healthy cooking/eating video developed by SATHI
- A cooking demonstration was conducted to show how to use healthy ingredients, how to read food nutrition labels and how to shop for healthy foods.
- A yoga session was conducted to show participants an alternative way to exercise.

### Session 3:

- A review of the stroke education was conducted to reinforce knowledge.
- Health screening was done to collect blood pressure, weight, waist circumference, and BMI.
- Participants were interviewed to evaluate changes made to their diets and exercise regimens.
- A post-test was given to the participants to evaluate how much knowledge was retained from the Stroke Prevention Education delivered.
- Peer leaders were recruited from the participants to be trained to help spread stroke awareness in the community.

## Results

During 2013-2014 , the Stroke Prevention Education Program had 59 participants. The following is a summary of the participants:

Group	n = 59	%
1	11	18.6
2	15	25.4
3	17	28.8
4	16	27.1
<b>Country of Birth</b>		
India	56	94.9
Srilanka	2	3.4
Unknown	1	1.7
<b>Age</b>		
Mean (SD)	72.96 (8.6)	
Median (IQR)	74.0 (70.0 – 77.0)	

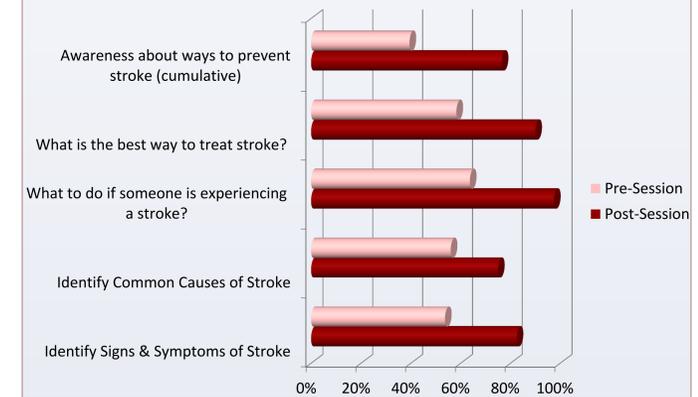
## Pictures



SATHI Team



## Results Continued...



## Outcomes

- Based on our experience ,a culturally tailored SAHAS (South Asian Health Awareness About Stroke) Curriculum was developed. This curriculum is being tested in 2014-2015 in the SA Community based in NJ.
- “Healthy Cooking “ , a nutritional video was specially developed to address the changes needed to SA diets.
- We were able to raise awareness about Stroke in the SA community as well as with health care providers and draw attention towards the special needs of the South Asian community.
- The community members were very appreciative of receiving this training and enthusiastic to become peer health coaches.

## References

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