



# The New Twist on Education: Creating Stroke Detectives at School

Gayle Watson MSN, RN, CCRN, Judy Dillon MSN, MA, RN, Kathy Morrison MSN, RN, CNRN

Penn State Hershey Medical Center



## Introduction

Although national programs have increased the public's awareness of stroke, many people do not know the specific risks of stroke. Most stroke risk factors begin in childhood, and incidence of childhood diabetes and obesity have increased in the past 10 years. The prevalence of obesity among children aged 6 to 11 years increased from 6.5% in 1980 to 19.6% in 2008. The prevalence of obesity among adolescents aged 12 to 19 years increased from 5.0% to 18.1%. Our stroke program has re-focused our efforts on educating school aged children on stroke awareness. We turn them into Stroke Detectives.

## Methods

- ❖ Worked with various school districts and churches to develop age appropriate programs related to stroke awareness, risk factors of stroke, and healthy lifestyle
- ❖ Created stroke detective pledge, stroke detective coloring book, activity sheets, movement cubes, FAST craft for elementary age students
- ❖ Utilized power point presentation, FAST cards, Risk score cards, food pyramid, and young stroke survivor case study for middle school and high school students
- ❖ Other activities include poster coloring contests, morning announcements in schools, group story reading, and stroke facts during Stroke Awareness Month
- ❖ Evaluation of process by healthcare volunteers

## Results

We provided stroke awareness and healthy lifestyle education to the following groups:

- ▶ preschool and school-age children at a large local church
- ▶ school students at an inner city elementary school
- ▶ suburban afterschool group
- ▶ inner city high school
- ▶ suburban private high school

Process evaluations concluded that K-3 and high school students were most receptive to content.

## Discussion

We discovered that all children want to be detectives. The pledge, written by our coordinator, proved the perfect hook to get the kids' attention. Armed with the FAST cards and risk assessment score cards, they were prepared to recognize and act if they saw signs of stroke. Children of all ages easily engaged in the activities related to stroke risk factors, healthy lifestyle, and stroke symptom recognition. A process analysis was done after each event. Findings were:

- ⊙ message needs to be clear and concise
- ⊙ language (written and spoken) must be simple and age appropriate
- ⊙ crafts, coloring and movement cubes limited to elementary ages
- ⊙ deficit simulation activities are effective at all ages
- ⊙ the story of a young stroke survivor dramatically impacted high school students

A limitation of this initiative is the fact that we had no measurement of individual impact on each student. A pre and post test to measure their knowledge has been created, but IRB approval to work with children is a challenging task. The plan will be to either revisit the group in person, or to contact them by phone. An evaluation of our program content and methods for event facilitators at each site has been created to gather feedback on our effectiveness. And we have been invited to participate with our department of public health in a new school nutrition program that would provide a structured 7-week schedule as well as parental involvement. The potential for impacting the knowledge and lifestyle choices of students and their parents through the same program is compelling.

## Conclusions

Childhood knowledge and lifestyle choices appear to be real threats to the future health of our population. Our evaluation process suggests that readiness for learning may be age-related. More research is needed to determine the most effective methods to educate and to measure the impact of these outreach efforts.

## References


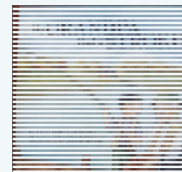
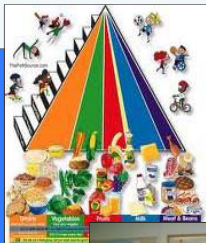
Centers for Disease Control and Prevention. *Health Topics: Childhood Obesity*. Available on-line: <http://www.cdc.gov/HealthyYouth/obesity/index.html>.

National Stroke Association. *Kids and Stroke*. Available on-line: <http://www.stroke.org/site/PageServer?pagename=KIDS>

**Stroke Detective Pledge**

We are stroke detectives.  
We're healthy every day.  
We eat our fruits and veggies.  
We run and jump and play!  
We are stroke detectives.  
We share what we have learned.  
We help our friends and family stay healthy every day.

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

Story Book

