

Community Education: Improving Stroke Awareness

Jennifer Ann Nascimento RN, Louise D. McCullough MD, PhD

Stroke Program • St. Vincent's Medical Center, Bridgeport, CT



Significance and Background

- Despite advances in stroke treatment, often the public remains unaware of stroke and few present to the hospital in time to obtain treatment.
- One contributing factor may be the lack of knowledge regarding initial signs and symptoms of an oncoming stroke and the need for immediate emergency care.
- St. Vincent's Medical Center initiated a community based education program to determine level of interest and awareness of stroke signs in our urban community.

Aim

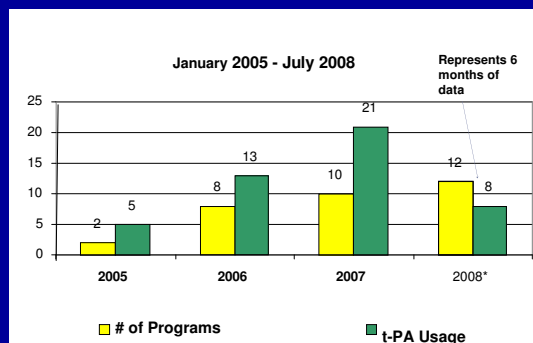
The aim of this ongoing project is to promote stroke awareness and to identify knowledge gaps by assessing our community's willingness to participate in educational sessions.

Discussion

For a new outreach program the sessions were well attended: 590 people attended a stroke education program or screening in 2006, 790 program participants in 2007; 635 from January to July of 2008. At one church screening 38 of the 40 participants had hypertension and disclosed that they were not aware that this was a stroke risk factor. A knowledge gap was identified at a senior education program; 20 of the 50 attendees could only name three stroke signs.

Also during this time St. Vincent's Medical Center developed a Stroke Center which has provided intensive stroke training for medical/hospital staff, and local EMS personnel. Media campaigns on stroke may have also heightened public awareness

Fig. 1 Stroke Education Programs vs. t-PA Usage



Interventions and Results

(Fig. 2) A retrospective chart review was performed from January 2006 to July 2008 collecting data on the number of patients who received thrombolytic treatment.

Since initiation of a stroke center a three fold rate increase was seen over a two and a half year period at 12%. Prior to the program pre-intervention thrombolytic rate was 4%.

Methods

(Fig. 1) Over a two and half year period thirty seven community outreach programs were conducted, eight in 2006, seventeen programs were held in 2007 and twelve programs were presented in the first six months of 2008. A variety of different venues were used to educate and interact with the community. This included print ads, radio and TV campaigns; stroke screenings at hospital, nursing homes and local churches. Sessions were designed using an open discussion format to determine the knowledge gaps in the community.

Conclusions

(Fig. 3) Our results suggest that there is a correlation between the number of community stroke education programs and individuals seeking treatment within the t-PA window. In the future, education sessions will have a pre and post test assessment to evaluate knowledge of risk factors, stroke signs and treatment to determine the effectiveness of our educational programs. In addition a questionnaire will be given to patients and families of t-PA treated patients to identify how stroke knowledge was obtained. More research is needed in this area to explore the effects of stroke education on treatment rates.

Fig. 2 Vincent's Medical Center IV t-PA Usage

	2005	2006	2007	2008
Ischemic strokes	126	206	213	94
t-PA	5	13	21	8
% of thrombolysis	4%	6%	10%	12% Includes data up to July

Fig 3 Correlation Analysis

