StrokeMobile: A Primary and Secondary Prevention Program in African American Communities

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Abstract

Community outreach teams were trained to conduct community-based programs designed to 1) reduce risk factors for vascular disease in African Americans (AA) through appropriate primary prevention health education and screening programs; 2) reduce risk factors for a second stroke through secondary prevention programs; 3) improve access of AAs to primary care in a medical home setting; and 4) enable and empower local AA communities to assume leadership for the conduct of primary and secondary prevention activities in their communities. Community members were engaged to improve the health literacy and cultural appropriateness of programs. Each team used a vehicle (StrokeMobile) to travel into community gathering places and homes to conduct programs. The poster describes activities in the first 18 months of the Project and lessons learned for gaining community support to reduce a first stroke and recurring strokes.

Background

SC is the buckle of the stroke belt. Greater disparities exist in SC than the rest of the nation in the prevalence of vascular disease and their risk factors between AAs and whites. Lack of insurance is 70% greater in AAs than whites and rates of multiple visits to the ED for CVD are three times those for whites. Stroke and heart attacks occur at earlier ages in AAs - only 11% occur after age 55 whereas in whites the percent is 55%. Blood pressure in AAs on average (36%) is 33% higher than in whites. AAs are 33% less likely to have their cholesterol checked, 13% less likely to eat 5 servings of fruits and vegetables each day, 30% more likely to be overweight or obese, and 23% less likely to engage in physical activity.

The StrokeMobile program was established to reduce risk factors for and recurrence of stroke in AA communities. It was based on findings from other studies that showed success when programs 1) involve the community in development and implementation, 2) match the target audiences' culture and health literacy, 3) cultivate inner derived motivation as well as knowledge of causal and risk factors, and 4) apply a comprehensive, multifactorial approach to the stroke rehabilitation process.

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Objective

1. Reduce risk factors for vascular disease through primary prevention programs in places where African Americans gather.
2. Reduce risk factors in first time stroke survivors and families to prevent a second stroke through in-home secondary prevention programs.
3. Improve access to primary care services in a medical home.
4. Enable and empower African American communities to take leadership role in promotion of primary and secondary prevention activities that reduce the risk for vascular disease.

Materials & Methods

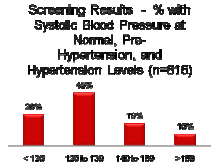
1. Establish partnerships with community groups serving social, economic, and health needs to aid community access and recruitment.
2. Recruit and train two heath outreach teams to implement programs. Teams each made up of a care manager (LPN) and an outreach coach who was raised in the community.
3. Lease two vans (StrokeMobiles) so teams can go into community and home settings.
4. Develop curriculum for primary prevention programs based on AHA/ASA Search Your Heart, NHLBI WeCan!, and motivational interviewing. Use focus groups in process.
5. Provide health screenings in communities to gather health data and recruit groups to sponsor and conduct primary prevention programs.
6. At screenings, identify medical homes where diagnostic indicators can be tracked.
7. Recruit and train lay health educators to conduct primary prevention programs.
8. Develop referral sources to locate and recruit first time stroke survivors and their families.
   a. Survivors had stroke within past six months.
   b. Survivor scored 3 and below on NIH Stroke Index.
   c. Hospital and/or agency rehabilitation programs have ended or are near completion.
   d. Sources included hospitals, home health care agencies, and marketing through local media.
9. Develop and conduct secondary prevention program for stroke survivors and their families. Base program on primary prevention curriculum and ASA ShareGivers' program with its emphasis on listening skills, support for the long-term adjustments to the disability, and aiding access to resources in community.

Outcomes

Organizations Sponsoring Screenings
(April 2008 to March 2009)

	Marlboro County	Darlington County	Total
Community-based*	11	15	26
Church-based	10	7	17
Totals	21	22	43

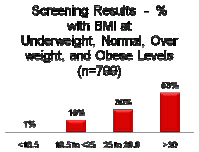
* City employees, worksites, community centers, fatherhood program, senior centers, hospitals, pharmacies, business sites, housing projects.



Attendance at Primary Prevention Classes

	Marlboro County		Darlington County	
	# Classes Conducted	Average Attendance per Class	# Classes Conducted	Averagee Attendance per Class
Community-based*	16 (n=2)	8	22 (n=3)	8
Church-based	18 (n=2)	6	0	-
Totals	34 (n=4)	7	22 (n=3)	8

Fatherhood program, community centers, senior centers
n = # of sponsoring organizations



Secondary Prevention Initiatives, March 2009 to Present
Recruitment of First Time Stroke Survivors from Newspaper Article

Age	NIH Stroke Index #	# of visits to date	Comments
	-	-	Met at screening at local hospital; declined StrokeMobile services at this time
60	-	1	3rd stroke, self taught on stroke knowledge, will serve on project advisory board
37	0	5	Preoccupied with chronic high BP; provided BP measurements and education; informed family doctor of need for BP control
62	0	1	Hazardous hygienic conditions in home prevent home visits; agreed to meet at doctor's office; started process for accessing local home remediation services
75	0	1	Had heart attack shortly after first visit
75	0	2	Needs in-home care giver, nutritious meals, and financial assistance; helped access local services for these needs
50	0	1	Needs ADA design upgrades in home; connected client with local resources to arrange upgrades

Summary

Lessons Learned: Barriers and ongoing solutions to vascular disease disparities

1.Grow community interest; Community groups are underused but also often reluctant partners
a.Negotiate more realistic MOUs
b.Build capacity for understanding severity and promoting health
c.Integrate health programs into partners' social, housing, and economic development programs

2. Develop health ministries; priority often trumped by other pastoral responsibilities
   a. Improve marketing of value of health and wellness to church leadership
   b. Advertise health ministry successes to incentivize other churches
   c. Promote implementation of established health ministry models

3. Develop lay health educators; lack of time and resources hinder interest
   a. Provide financial incentives to qualified community members
   b. Lay health educators recruit and educate within their familiar neighborhoods
   c. Inspire and recruit lay persons through quality primary prevention programs

4. Recruit first time stroke survivors into secondary prevention programs; hospital referrals hindered with privacy issues
   a. Cultivate relations with home health care agencies to access first time stroke survivors when hospital/agency rehabilitation process ends
   b. Market programs through newspaper articles, ads, cable network, flyers in gathering places

5. Improve capacity of program staff to motivate behavior change and provide multi-faceted support
   a. Use cultural and health literate appropriate written and oral presentations
   b. Use interactive learning methods to effectively engage program participants
   c. Establish expertise in motivational interviewing through practice
   d. Use patient centered listening skills, empathy, open ended questions with stroke survivors and their family
   e. Gain familiarity with community resources