

Improvements in knowledge of heart attack and stroke symptoms and 911 use among low-income Hispanic women

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Background

Research indicates a link between symptom recognition and time to hospitalization; however, knowledge of heart attack and stroke symptoms among ethnic minorities is lacking.

Methods

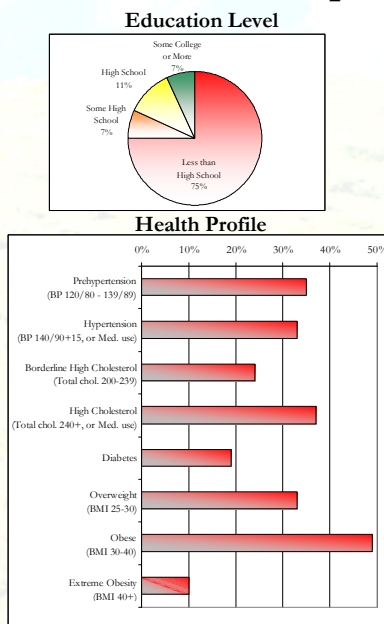
The California WISEWOMAN (WW) program provides cardiovascular disease (CVD) screening, education, and lifestyle counseling to underserved women, as well as education on the signs and symptoms of heart attack and stroke, and calling 911. From 2007 to 2008, the WW program administered survey questions from the Behavioral Risk Factor Surveillance Survey (BRFSS) cardiac module to 154 Hispanic women before and after four educational sessions. Findings were compared with the California BRFSS (2008).

Survey

Administered verbally, in Spanish

Signs and Symptoms of Heart Attack and Stroke/Calling 911 Survey			
I. RECORD & PATIENT IDENTIFICATION			
Person ID #	First Name	Sex ID	
II. PARTICIPANT IDENTIFICATION			
Name	Last	First	MI
III. SURVEY QUESTIONS			
Now I would like to ask you about your knowledge of the signs and symptoms of a heart attack and stroke.			
1. Which of the following do you think is a symptom of a heart attack? For each, tell me "yes," "no," or you're "not sure"			
a. pain or discomfort in the jaw, neck, or back	Yes	No	Not sure
b. feeling weak, lightheaded, or faint	Yes	No	Not sure
c. chest pain or discomfort	Yes	No	Not sure
d. sudden trouble seeing in one or both eyes	Yes	No	Not sure
e. pain or discomfort in the arms or shoulder	Yes	No	Not sure
f. shortness of breath	Yes	No	Not sure
2. Which of the following do you think is a symptom of a stroke? For each, tell me "yes," "no," or you're "not sure"			
a. sudden confusion or trouble speaking	Yes	No	Not sure
b. sudden numbness or weakness of face, arm, or leg, especially on one side	Yes	No	Not sure
c. sudden trouble seeing in one or both eyes	Yes	No	Not sure
d. sudden chest pain or discomfort	Yes	No	Not sure
e. sudden trouble walking, dizziness, or loss of balance	Yes	No	Not sure
f. severe headache with no known cause	Yes	No	Not sure
3. If you thought someone was having a heart attack or a stroke, what is the first thing you would do?			
a. Take them to the hospital	Yes	e. Do something else	
b. Tell them to call their doctor	Yes	f. Don't know / Not sure	
c. Call 911	Yes		
d. Call their spouse or a family member	Yes		

An At-Risk Group



Educational Sessions

Brief (~5 minute) individual educational sessions were provided by a Community Health Worker (CHW) following the baseline survey and during three 45-minute WISEWOMAN lifestyle interventions focused on healthy eating and physical activity. In addition to counseling, women received printed information.

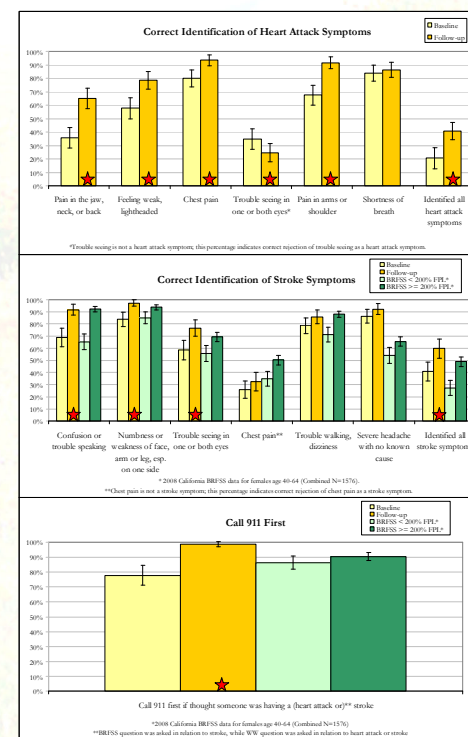
During counseling, the CHW briefly described each of the symptoms and emphasized the importance of calling 911 when those symptoms are recognized.



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Results

Error bars represent 95% confidence intervals
★Indicates statistically significant change from baseline (two-tailed paired T-test)



Conclusion

Targeted messaging is successful in improving knowledge of heart attack and stroke symptoms, and the need to call 911. Increased knowledge will prevent mortality and morbidity from CVD events in high risk, underserved populations. Results were used to refine WISEWOMAN program protocols and guide the selection and use of educational materials.

