

Multi-disciplinary healthcare research/publications

Stuart N Hoffman; Jonathan Hosey; Walter F Stewart; **Mary A Blosky**; Craig Wood; Judith Reardon, Linda M Famiglio. (2006).

Recognition and Free Recall of Stroke Risk Factors in Rural Pennsylvania. Poster presented at the American Academy of Neurology; San Diego, CA, April.

Objective: To determine public knowledge of stroke risk factors in a rural population at increased risk for stroke.

Background: Increased public awareness of stroke risk factors might improve behaviors to reduce stroke. However, little is known about knowledge of stroke risk in rural populations.

Design/Methods: An age-stratified random sample of 1426 adults ≥ 18 years, participated in a random-digit-dial telephone survey. Respondents were first asked to name established stroke risk factors (i.e., "spontaneous recall"). Subsequently both true and false risk factors were presented and respondents were asked to indicate whether or not they were related to risk of stroke (i.e., "recognition").

Results: The mean age of respondents was 52.4 years; 71% were women; 45% were ≥ 55 years; and 96% were Caucasian. The median number of stroke factors recalled was one; 78% spontaneously recalled ≥ 1 stroke risk factor; 30% recalled ≥ 2 factors. The most frequently recalled risk factors included hypertension (49%), smoking (30%), and hypercholesterolemia (19%). The median number of risk factors recognized was four. The most frequently recognized risk factors were hypertension (99%), smoking (92%), and hypercholesterolemia (91%). Chronic lung disease, depression, and epilepsy were misidentified as stroke risk factors, each by more than 29% of respondents. Factors independently associated with recall of ≥ 2 risk factors included age, which showed a U-shaped relationship with the odds ratio [OR] peaking at ages 50-59 (OR 3.14; 95% confidence interval [CI] 1.94-5.48); some college education (OR 1.66; CI 1.31-2.10); hypercholesterolemia (OR 1.39; CI 1.08-1.79), and vascular disease (OR 1.59; CI 1.05-2.39).

Conclusions/Relevance: Community awareness of stroke risk factors was limited in this rural population. Respondents with the largest gaps in knowledge of established stroke risk factors included young adults, the elderly and those with limited education. Targeted strategies to improve health behavior might reduce stroke incidence over time.

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