

People who recognize stroke symptoms still may not call 9-1-1

May 13 2010

(PhysOrg.com) -- People who realize that stroke symptoms are occurring in a family member or friend still may not call 9-1-1 — delaying vital treatment, according to research published in *Stroke: Journal of the American Heart Association*.

“This study emphasizes the critical roles that symptom recognition and the calling of 9-1-1 have in reducing delays in hospital arrival to receive urgent [stroke](#) treatment,” said Chris Fussman, M.S., lead author of the study and an epidemiologist with the Michigan Department of Community Health in Lansing, Mich.

Researchers from the Michigan Department of Community Health surveyed 4,814 adults in the state to assess whether they knew when to call for an ambulance when stroke symptoms have been observed. They found that only 14 percent would dial 9-1-1 for three common stroke symptoms, and 37 percent reported that they would not call 9-1-1 for any of the stroke symptoms.

Participants were asked to report their first reactions to five hypothetical situations. Three situations — sudden slurred speech, sudden numbness on one side of the body or sudden blurry vision — were symptoms of a stroke. The other two were a high fever or an injured leg, which are not stroke symptoms. The survey didn’t include other stroke symptoms, such as sudden trouble walking or severe headache with no known cause.

Participants could respond that they would first “give medicine or first

aid,” “call the doctor,” “take them to an [emergency room](#),” “call 9-1-1,” “stay with them until they felt better;” or “something else.” Calling 9-1-1 was deemed the only correct response.

Additional results showed that:

- Of the 27.6 percent of the participants who knew all three stroke warning symptoms, only 17.6 percent said they would call 9-1-1 for all three stroke symptoms.
- Fifty-one percent of all respondents would call 9-1-1 for someone having sudden trouble speaking or understanding; 42 percent would call 9-1-1 for someone having sudden numbness or weakness on one side of their body; and 20 percent would call for someone who had sudden trouble seeing out of one or both eyes.
- In four of five of the hypothetical scenarios, taking patients to the emergency room — not calling for an ambulance — was the most common response.
- Older people were more likely than younger people to dial 9-1-1 for all three stroke situations — 6.1 percent of those 18 to 24 years old compared to 17.6 percent of those ages 65 to 74.

Gender, race, education, household income and insurance status were not significantly related to a person’s intent to call 9-1-1.

The findings indicate a “disconnect” that could be improved with greater public awareness efforts focused on connecting the signs of a stroke with calling emergency medical services (EMS), researchers said.

“Respondents appear to be unaware of the advantages of EMS transport, and the fact that public health recommendations advise the use of EMS over private transport,” Fussman said. “Calling 9-1-1 gets you to the hospital fast and allows the paramedics to communicate with the hospital so staff are prepared for your arrival.”

The earlier the treatment begins, the greater the chances of recovering from stroke — the No. 3 killer and a leading cause of adult disability in the United States. The clot-busting drug tissue plasminogen activator (tPA) is the gold standard treatment for stroke; however, most patients aren't eligible to receive it because they don't get to the hospital in time. Current stroke treatment guidelines call for patients to arrive at a hospital within 4.5 hours after symptoms begin in order for tPA to be effective.

Fussman cautioned against applying these findings broadly to other states. Previous research found that, depending on the stroke symptoms, between 33 percent and 72 percent of respondents in upstate New York would dial 9-1-1 and between 41 percent and 51 percent of people in Montana would.

It's unclear why people are reluctant to call an ambulance despite being aware of the signs of stroke, Fussman said. Future studies should address possible barriers such as denial, embarrassment, cost, and cultural attitudes toward calling for an ambulance.

“I don't think that a lack of stroke knowledge is the problem here.” Fussman said. “The problem is what people do with the knowledge they have,” he said. “The public needs to be reassured that EMS is the best option when dealing with stroke.”

Provided by American Heart Association

Citation: People who recognize stroke symptoms still may not call 9-1-1 (2010, May 13) retrieved 4 June 2024 from <https://medicalxpress.com/news/2010-05-people-symptoms-.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is

provided for information purposes only.