

American Heart Association rapid access journal report:

CPR improves quality of life for cardiac arrest survivors

DALLAS, Oct. 7 – Cardiac arrest survivors who received bystander CPR were likely to have a “good quality of life” one year later, according to a report in today’s rapid access issue of *Circulation: Journal of the American Heart Association*.

The findings refute the notion that cardiac arrest survivors are often severely disabled. Researchers found that survivors generally live at a “very high functional level.”

“The study results add to the current knowledge that receiving CPR improves survival rates and quality of life,” said the study’s lead author Ian Stiell, M.D., chair of emergency medicine research at Ottawa Health Research Institute, in Ottawa, Ontario, Canada.

Cardiac arrest is the stopping of the heartbeat, usually because the heart’s electrical signal is disrupted. An estimated 250,000 people in the United States die of sudden cardiac arrest outside of a hospital each year. Cardiac arrest is often associated with coronary heart disease.

Only about 5 percent of victims survive, because there is only a five- to 10-minute window for resuscitation before death, Stiell said.

In earlier studies, Stiell and colleagues found that cardiac arrest victims are three times more likely to survive if they receive bystander CPR. “This makes common sense. The earlier you have CPR, the more likely that there will be less brain damage. You restore circulation to other vital organs earlier as well,” Stiell said.

The researchers found that only 14.3 percent of the more than 8,000 patients studied, had bystander CPR before going to the hospital. “We think that bystander CPR is being sadly overlooked. This [statistic] has not changed over the 10 years that we’ve studied cardiac arrest in Ontario,” Stiell said. “We’re concerned at times that there is too much focus on high technology solutions. You don’t have to be a doctor or nurse – anyone can do it. You just need your hands and basic training.”

Stiell and colleagues examined physical and psychological functioning in cardiac arrest survivors and what might improve quality of life for them.

The patients studied came from 20 cities in Ontario. They had suffered cardiac arrest outside the hospital setting from 1995 to 2000. Only 4 percent survived for at least a year.

Researchers contacted known survivors a year after their cardiac arrests, interviewing 268 people. To determine quality of life, the researchers asked a series of questions dealing with eight attributes: vision, hearing, speech, mobility, dexterity, emotion, cognition and pain.

For example, patients (or their families) could rate their vision from “sees well” to “unable to see at all.” Based on their answers, researchers gave participants summary scores on a scale in which zero denotes death and one is perfect health.

“We found that, overall, the patients had good quality of life,” Stiell said.

The authors report that 86 percent of patients studied had high overall cerebral performance, and their average quality-of-life score was .80 on the 0-to-1 scale. Previous research suggests that the average score for people in the same age group in the general population is .83, he said.

“Essentially, this means that people who survive cardiac arrest are functioning about as well as the average person of the same age,” Stiell said.

Stiell added that studies have found that the worst CPR delivery rates are in the home; yet about 80 percent of all cardiac arrests occur inside residences.

“The message is that if someone in your family has a heart condition, you should certainly know CPR,” Stiell said.

“We believe that CPR is the forgotten link in the chain of survival,” Stiell said. “If your community has a low percentage bystander CPR rate like ours, the public is functioning at a much lower rate than it could be. Many lives are being lost,” he said.

Future studies should focus on how to improve the rate of bystander CPR, Stiell said.

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NR03 – 1137 (Circ/Stiell)

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