Shortened CPR Training Course Shown Effective

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DALLAS — The American Heart Association has begun marketing a stripped down 22-minute program in adult basic life support CPR designed to replace the standard 4-hour course for nonmedical trainees.

The self-guided video program is a key element in the AHA's ambitious plan to double the number of Americans annually trained in CPR to 16 million a year by 2010. Accomplishing that goal, in turn, is expected to result in a 20% increase in survivors of out-of-hospital cardiac arrest.

Those additional 8 million new CPR trainees per year beyond current numbers must be drawn exclusively from the ranks of the general public, since all health care professionals and first responders already get trained. "It's an extremely daunting challenge," Dr. Ahamed Idris noted at the annual scientific sessions of the AHA.

The 4-hour duration of the standard basic life support course was seen as a major impediment.

"Four hours is a lot of time for an individual, and a lot of time to ask of companies in being good citizens by releasing employees for training," observed Dr. Idris, professor of emergency medicine at the University of Texas, Dallas.

He presented the results of a definitive field test of the program, which was developed by the AHA and Laerdal Medical. The field test, conducted at American Airlines headquarters in Dallas, involved 268 CPR-naive airline employees who were randomized to the standard 4-hour CPR course or the 22-minute video course. Immediately after, each participant performed four cycles of CPR on a computerized mannequin that recorded key chest compression and ventilation data. The short-course group did as well as the controls.

Three blinded expert instructors evaluated videotapes of every participant, rating their performance of six key basic life support skills. The short-course group did as well as the standard-course group in four areas and outperformed them in two.

At follow-up testing 6 months later, skill retention was the same in both groups. Based upon these favorable results, the AHA has begun rolling out the new program, called CPR Anytime, at a cost of about $30 per kit.

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DR. IDRIS

The test group also received a new 5-minute training program in the use of automatic external defibrillators (AEDs). In skills testing, this proved significantly more effective than the standard AHA Heartsaver AED course. However, the 5-minute AED course is undergoing fine tuning and will be released later, Dr. Idris continued.

He explained that the 22-minute video-based course is designed so that each trainee has their own "minikin," an inflatable, portable device that incorporates all of the key characteristics of the full-sized training mannequin shared by six students in the standard 4-hour course. Deflated, the minikin fits into a cardboard box about the size of a medium deep-dish pizza.

"The current model for CPR training is 'Watch, then do.' The new paradigm is 'Do while watching.' In the 4-hour course a student gets 6-10 minutes of practice at most. In the 22-minute video-based course a student gets 17 minutes of practice on the minikin," Dr. Idris said.

But that doesn't mean the 4-hour course for physicians is going away. "There's a lot of cognitive material in the 4-hour course that really benefits a health care professional," he said.

In a separate presentation, Dr. Sumeet S. Chugh presented an analysis of 714 sudden cardiac deaths in the ongoing Oregon Sudden Unexpected Death Study, showing that the incidence of cardiac arrest in the Portland area was up to 80% greater among residents living in neighborhoods in the lowest quartile of socioeconomic status.

The inference is that as the national public access AED program grows, AED deployment in low-income neighborhoods has to be made a priority; that's where the greatest proportion of cardiac arrest deaths occur, said Dr. Chugh, a cardiologist at Oregon Health and Science University, Portland, and director of the Oregon study. ■

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