CPR and AED for Laypersons Initiative in a Place of Worship

BRIEF BACKGROUND
Cardiovascular disease is a major cause of death in Indonesia. Due to delays in medical management, acute coronary syndrome leads to almost 100% of deaths outside the hospital. Sudden cardiac arrest management by laypersons in an out-of-hospital setting is paramount. Early implementation of high-quality CPR and the use of an AED has significantly improved chances of survival. Nonetheless, the extent of a layperson's knowledge of CPR and AED had not been investigated in Indonesia.

STEPS TAKEN
The Department of Emergency Medicine at Universitas Brawijaya, Saiful Anwar General Hospital set out to study laypersons' knowledge, possible barriers and interest regarding CPR-AED. A two-hour CPR-AED layperson certification course was created, including an instructional presentation and video demo followed by a hands-on practice sequence on how to call EMS 119, perform hands-only CPR and use an AED. The course was conducted in a church, and questionnaires were completed by the participating laypersons.

CHALLENGES
Laypersons recognized their role in the immediate care given to victims in sudden cardiac arrest situations and had a positive attitude toward CPR. However, previous knowledge and training was inadequate.

RESULTS
Of 105 worshippers at the church where the course was held, 57 were willing to take the class after Sunday service; 27 (47.37%) were male and 30 (52.63%) were female. Ages ranged from 18-76, with an average age of 49. Less than one tenth of the respondents (n = 51, 89.47%) had never attended a CPR-AED course before.
Nearly the whole sample considered the knowledge of CPR-AED important, and most of the respondents (n=55, 96.49%) showed a willingness to perform CPR and 54 (94.74%) to use an AED. The average number of correct answers was 80.35%. This value was greater among subjects with higher level of education (85.24%) and lesser among those who reported previous training in CPR-AED (76.67% ± 17.8%).
OUTLOOK

Teaching CPR-AED in a place of worship was an effective way to develop readiness of laypersons ready for an emergency. Moving forward, CPR-AED training among community organizations could be an effective long-term strategy to spread benefits to the wider community. To maintain knowledge and skills retention, regular and refresher training for the community are recommended. Phase 3 of the initiative, training patients and family members with high-risk conditions like cardiac arrest and severe heart failure before hospital discharge.

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