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## Indonesia – Community Training

# 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 ( $76.67\% \pm 17.8\%$ ).

## 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.

## CONTACT

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