More bystanders respond to CPR incidents with use of 3 aids: Study

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A study has found that three measures, when applied together, have more than doubled the likelihood of bystanders performing cardiopulmonary resuscitation (CPR) on cardiac arrest victims in Singapore.

Dispatch-assisted CPR, CPR and automated external defibrillator training, and the myResponder app were found to have raised the Singapore Civil Defence Force’s responses of bystanders giving lifesaving assistance to heart attack victims before paramedics attended to them.

Dispatch-assisted CPR refers to CPR that is administered under the guidance of a first responder, such as a paramedic who may, through a phone call, assess the situation and give instructions to a bystander who then performs CPR.

The study was conducted by researchers at the Duke-NUS Medical School, Duke University, and several organisations here, and published last month.

“Our findings clearly showed that a bundled, national, bystander-focused public health intervention increased the chances of laypeople performing bystander CPR,” said Assistant Professor Audrey L. Blewer, an epidemiologist and resuscitation scientist in the Department of Family Medicine and Community Health at Duke University School of Medicine.

Data from bystander intervention programmes between 2011 and 2016 was used in the study, which found that the probability of victims receiving bystander CPR increased with each added intervention.

When all three interventions were applied, the likelihood of bystander CPR being performed increased nearly eight times compared with no intervention.

The likelihood of a victim’s survival also increased more than three-fold, compared with no intervention, when all three aids were adopted.

Professor Marcus Ong, senior author of the study and director of the Health Services and Systems Research Programme at Duke-NUS, said: “Understanding the impact of public health interventions helps inform strategies to increase bystander CPR and targeted initiatives to improve survival from out-of-hospital cardiac arrests.

“Studies like this allow us to enhance our public health systems and save more lives in the process.”

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