

CARDIAC ARREST

Heart-stopping moment

Training more people in skills like CPR makes all the difference between life and death during emergencies

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HAD paramedics not used an automated external defibrillator (AED) on her in time, Linbert Lim candidly admitted that she would have died three years ago.

Then 41, the housewife, who has a history of high blood cholesterol, suffered a heart attack after her regular gym session. By the time an ambulance arrived, she had blacked out; and while on the way to the hospital, her heartbeat stopped.

Thankfully, a paramedic used an AED — a device that uses electrical therapy to treat heart attack victims — to restore Linbert's heart rhythm. "Without that ... you wouldn't be talking to me right now," she said.

As in Linbert's case, time is of the essence when it comes to saving those who suffer from cardiac arrest.

"No matter how efficient the ambulance service is, it still needs some time to get to its destination," said Associate Professor Terrance Chua, chairman of the Singapore Heart Foundation (SHF) and deputy medical director of the National Heart Centre.

"For every minute of delay in adminis-

HELP SAVE LIVES

The Singapore Heart Foundation recently launched a four-hour programme to equip the public with two vital skills needed during cardiac emergencies — CPR and knowledge of how an AED machine works. For details, email cpaed@heart.org.sg or call 6354 9370.



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tering cardiopulmonary resuscitation (CPR) and defibrillation, the victim's chance of survival drops by 7 to 10 per cent. So if you delay treatment by 10 minutes from the time of the collapse, the victim's survival rate is going to be very poor."

In Singapore, a mere 2.7 per cent of people who suffer from cardiac arrest in public areas survive. This pales in comparison to cities such as Seattle in the United States and Gottenburg in Sweden, where survival rates are as high as 40 per cent.

With greater public education, the SHF hopes to change this.

"We hope to improve out-of-hospital sudden cardiac arrest survival rates in Singapore by having more people trained in CPR and AED, so they have enough confidence to use it when the need arises," said Assoc Prof Chua.

A heart attack occurs when blood flow

to the heart is obstructed, due to a blood clot or rupture of fatty deposits (cholesterol) in the artery wall. When the heart muscle is starved of blood and oxygen, a person can "collapse within minutes". In some cases, said Assoc Prof Chua, there are no warning signs prior to the attack.

Applying CPR and AED in time can save lives in cardiac emergencies.

Chest compressions and mouth-to-mouth breathing used in CPR help to restore the function of the heart by making sure that there is a continuous flow of oxygen to the lungs and brain. And in most cases, applying defibrillation in addition to CPR is crucial to restoring normal heart rhythms.

Although an AED may not always be available during an emergency, Assoc Prof Chua said that "every little bit of CPR helps the patient buy some time" before the ambulance arrives.