

Editorial

Extending cardiopulmonary resuscitation training to schools

推廣心肺復甦法訓練至學校

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Editor-in-Chief

On 28 June 2006, 2,308 school students, using mini-manikins, were taught cardiopulmonary resuscitation (CPR) by St John Ambulance Australia, breaking the Guinness World Record of total number of people performing CPR in one day.¹ Later in that year in Hong Kong, a mass CPR training program for schools was organised by the North District Hospital, Hong Kong St John Ambulance Association, Society for Prehospital Advanced Resuscitation and Kiss of Life (SPARK of Life) and the North District Council from September to October 2006. On 11 November 2006, 436 students, teachers and parents from nine secondary and seven primary schools performed CPR together at the North District Hospital. The very size made a new record for Hong Kong (in fact, a total of 664 had attended CPR training in September and October) (Figures 1a & 1b).²

There are many potential benefits to school students in learning CPR: the acquisition of knowledge and skill that can save lives, awareness and mental preparation for emergency situations, increased confidence and self-esteem, and a sense of contribution to the community.³ In addition, training all school children may well be the best way to bring CPR within reach of the whole population, as efforts to teach adults CPR have been disappointing. Children, unlike adults, are more easily

accessible, more interested in learning new skills (such as CPR), and faster learners. Young people are also more likely to perform CPR in emergencies than their older counterparts.³ There are other advantages too: the school-based approach will give the community a sense of ownership and a vested interest in training, and the course will at least teach young students how to recognise signs of cardiac arrest and seek immediate help instead of panic in medical emergencies. CPR training also stresses heart disease as a killer, and encourages adherence to a healthy lifestyle among participants.⁴

In 1961, Norway became the first country to teach CPR to schoolchildren, followed six years later by Czechoslovakia.^{3,5} Since then, CPR training has been offered sporadically to students in Scandinavia, Great Britain, Canada, the United States and other countries. The suitability of teaching CPR to young children may be debatable. Students in their mid-teens are mature enough to learn lifesaving skills, although better performance has been noted in older teenagers.⁶ Lester et al showed that children as young as eleven were capable of learning CPR. However at eleven years old, such skills began to be lost rapidly after training.⁷ The Austrian Red Cross has started lifesaving first aid training for children as young as eight.⁵ CPR are taught as an optional component of the New Zealand school curriculum, in both primary and secondary schools.⁸

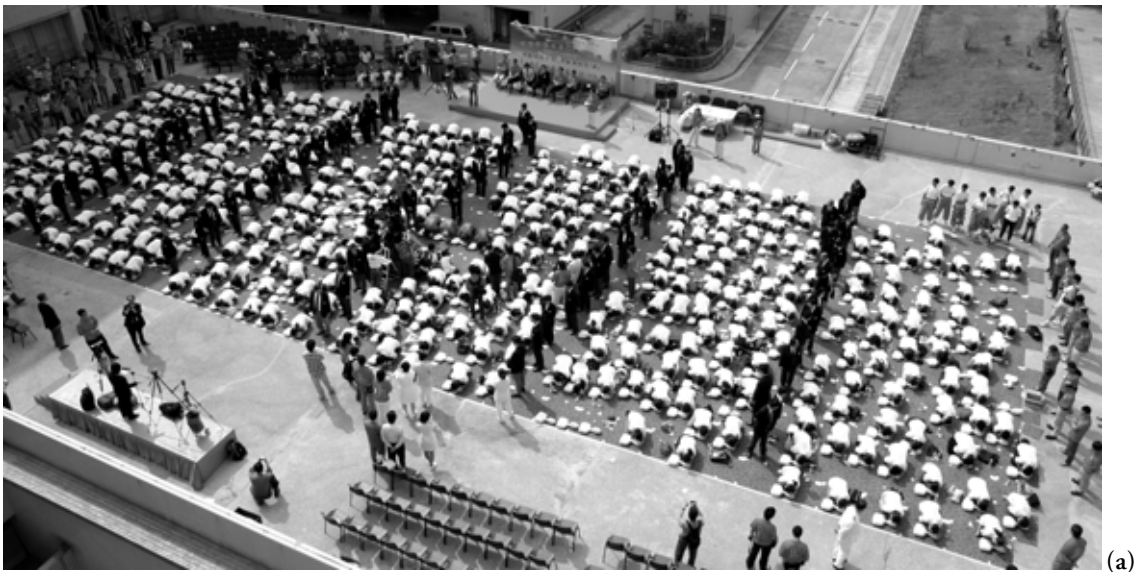
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The most significant barriers to CPR training have been identified as: (1) lack of funding, (2) difficulty of finding a suitable venue that is both accessible and convenient, (3) already busy school curriculum, and



(a)



(b)

Figure 1. Mass CPR under supervision at North District Hospital.

(4) the question of whether it is appropriate to teach resuscitation to students of primary schools.^{6,8} Consequently, to increase CPR training in the community, the best strategies are to increase funding, use schools as venues for teaching CPR, identify opportunities in the curriculum such as physical-education classes to teach CPR, have more certified

instructors, and make CPR training a community service requirement. It has been shown that the presence of a CPR trained teacher or other resource person in the school was associated with increased likelihood of having training programs for students.³ It is also logical that teachers should be trained before or at least at the same time as the students.

If CPR can be successfully taught at schools, the next movement will be to extend the training to other educational institutions, such as universities, technical schools, driving schools, health classes, even disciplinary and military services.³ With such a strategy, it would not be too difficult to train 20% of our population in CPR, as the minimum standard recommended by the American Heart Association.⁹

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