

Effectiveness in the fight against Sudden Cardiac Death has impressively increased as a result of recent developments in out-of-hospital resuscitation.

The objective of our study has been to show how practicable and beneficial short CPR (Cardiopulmonary Resuscitation) training programmes with the Laerdal MiniAnne™ can be within a school environment.

THE PROJECT

Within their seven years of secondary education all 1450 students at the school will go through an initial training phase followed by two refresher courses on how to practise CPR.

Teachers, administrative and technical staff are also invited to participate.

OBJECTIVES

This school having become the first in Luxembourg to install an AED (automated external defibrillator) with the aim of adequately training students in basic life support and automated external defibrillation (BLS/AED), the larger goal is to inspire other schools and institutions to develop similar programmes for laypeople and to help promote and refine public-health strategies.

METHOD

The MiniAnne CPR programme, developed by Laerdal, was selected as its inflatable manikin (MiniAnne) and the 30-minute instructional DVD in German fully matched our purpose.

Sponsorship by the Athénée Alumni has allowed us to purchase 100 MiniAnne kits.

The first half of 2009 was our starting period, with all 8th, 10th, 12th and final year students (i.e. a total of 736) learning CPR in 24 sessions of one teaching-hour each. For 8th and 10th-grade students training was integrated into their biology course, whereas for 12th and 13th-grade students it became part of their physical education syllabus.

Training was given and supervised by the teachers involved and the coordinator of the school's emergency team assisted by two student-members of his team.

The project has been highlighted in the national media and was also presented at the National Health Conference in Mondorf-les-Bains (Luxbg).



I am sure that MiniAnne has taught me how to save lives in emergency situations.

8th grade, Athénée

Everybody should give it a try, because you learn so much in a short period of time.

8th grade, Athénée

A very good exercise, but I am not sure how well I will or would manage in a real-life emergency.

10th grade, Athénée

This is an efficient, realistic way of learning some of the fundamentals of first aid.

12th grade, Athénée

I wouldn't mind taking MiniAnne home with me.

13th grade, Athénée



School emergency Team : Éischt Hëllef Team Kolléisch - EHTK

RESULTS

On average 88.1% of these students are confident that they now know how to perform chest compressions correctly, and 82.5% feel that they can properly carry out breathing assistance. 85.9% are thoroughly familiar with the right order of steps in the chain of survival, and 75% have shown a marked interest in further first aid courses organized by the school's emergency team. (As shown in the graphs, there are, however, some differences between the ways in which boys, girls and different age groups assessed themselves.)

FIVE REASONS FOR SUCCESS

The pedagogical concept of MiniAnne fits in perfectly with our 50-minute lesson units.

The overall cost is low, as 100 MiniAnne manikins allow quite a large number of students to be trained over a period of several years.

Student-members of the school emergency team prepare the training kits and assist their fellow-pupils during training sessions.

Every student will learn CPR in their 8th grade and will refresh this competence in their 10th and 12th grade at school.

Expert support has been given by members of the Luxembourg Resuscitation Council, especially Dr Jean Beissel, cardiologist, and by Mr Carlo Clarens, Head-Nurse Officer, fire brigade Luxembourg.

CONCLUSIONS

This CPR training programme, introduced in 2009, now belongs to the school curriculum and will be implemented each year.

As a consequence of the success of this project, the school has become the first in Luxembourg to install an AED, and will provide further related training in BLS/AED.

Supported by external experts, the school emergency team will regularly test and evaluate CPR skills of students (and staff) by organizing simulations of Sudden Cardiac Death.

EVALUATION

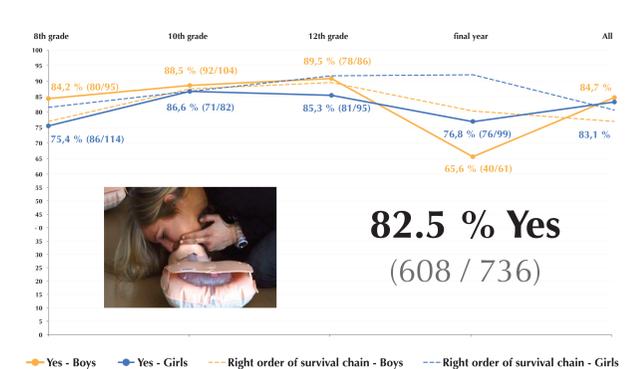
Evaluation sheets for every participating student concentrated on self-evaluation of their performance of CPR, on the right order of steps in the chain of survival, and on individual motivation in view of attending further training units. (736 students out of 756 trained returned their evaluation sheets.)

I am capable now of performing chest compressions correctly



88.1 % Yes
(648 / 736)

I am capable now of performing breathing assistance correctly



82.5 % Yes
(608 / 736)

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The authors declare no conflict of interest.