

Mass CPR Training

José Javier García del Águila on Behalf of Research Unit of EPES

Background and objective:

First responder training is key to the survival of cardiac arrest victims. Our objective was to analyze the effectiveness of method designed to teach basic life support (BLS) to a large number of school students on a single day.



Methods:

Analysis of the pre and post-training knowledge about BLS. Two sessions were conducted with 1000 students each, aged between 13 and 18 years old, from urban and rural schools. Each session included four hours of training to 250 students per hour. The ratio of students-to-monitors was 10:1. The test on BLS knowledge was administered before the training session and again at 7 days and 6 months, with 10 questions drawn from the BLS standardized courses.

RESULTS

Two thousand students participated. The three tests were completed by 1,814 (90.7%), mean age 13.3 ± 2.1 years, 53.2% female; 374 students (20.6%) had prior knowledge of BLS. Mean test scores (pre-training, at 7 days and 6 months) were 5.2 ± 1.8 , 7 ± 1.6 and 6.6 ± 1.6 ($p < 0.001$) respectively. On analyzing the association between improved test score and prior knowledge of BLS, we observed an inverse correlation: students with the lowest initial scores showed the greatest improvement. On comparing groups of students with and without previous knowledge, the following scores were found for the 3 tests: 5.95 ± 1.7 , 7.3 ± 1.5 , 6.7 ± 1.7 vs 5 ± 1.7 , 7 ± 1.6 , 6.6 ± 1.6 , ($p < 0.000$, $p = 0.001$ and $p = 0.67$ respectively).

Conclusions:

Post-training course level of knowledge showed significant improvement and was maintained at 6 months. Improvement was greater in students with lower initial scores. Mass training is a useful method for increasing theoretical first responder knowledge about BLS.

