THE EFFECTIVENESS OF CPR TRAINING TAUGHT BY STUDENT INSTRUCTORS USING VIDEO INSTRUCTION IN SCHOOLS - A PILOT STUDY

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Introduction

Higher rates of cardiopulmonary resuscitation (CPR) performed by members of the public has always been the cornerstone to improve survival from out of hospital cardiac arrest (OHCA). One measure that has shown to have long term impact on increasing CPR rates is teaching CPR in schools.

Objective

To facilitate implementation of CPR training as an integral part of school education, using video instructions and minimally trained student instructors.

Methodology

16 student instructors were given Basic Life Support (BLS) booklets to read in advance. 2 trained CPR instructors (Emergency Physicians) taught and showed video instructions on performing CPR using the qCPR app on mannequins. Four days later, the student instructors using the same video learning and qCPR app mannequins, facilitated learning and practice of chest compressions for 61, 13 year olds with no previous CPR training.

The students were then assessed on their effectiveness of CPR; using the qCPR app score as an independent assessment method. There were two groups - a control group that was allowed to view the live feedback quality of CPR; the study group were assessed by performing chest compressions without live feedback.

Results

In the control group, mean qCPR score ± SD was 96.83 (± 4.92), mean depth of compression ± SD was 92 (± 10.20), and total compressions/minute ± SD was 115.33 (± 5.96), and release ± SD was 99.67 (± 0.82). In the study, mean qCPR score ± SD was 90.86 (± 12.82), mean depth of compression ± SD was 89.12 (± 21.56), and total compressions/minute was ± SD 118.12 (± 10.17), and release ± SD was 97.69 (± 14.11). In the written questionnaire, more than 70% of participants reported having a positive impression (Likert Scale 1-2) of the training. 48% reported having an increased willingness to learn CPR than previously.

Conclusion

In both groups, CPR performance is high with mean scores above 90%. The qCPR control group achieved an overall higher rate indicating that qCPR feedback is an effective training, practice, and assessment tool in CPR training.

Keyword
qCPR, student instructors, CPR