ALERT protocol: Efficiency of an e-learning training in a non-Advanced Medical Priority Dispatch System (AMPDS) Emergency Medical Services centres

Samuel Stipulante, Yannick Hansenne, Mehdi El Fassi, Régine Zandona, Anne-Francoise Donneau, Vincent D’Orio and Alexandre Ghuysen.

*Federal Public Health Services, Liege, Belgium, 1Department of Public Health, University of Liege, Belgium, 2Department of Medical Informatics and Biostatistics, University of Liege, Belgium, 3Department of Emergency Medicine, University Hospital of Liege, Belgium

Objectives

The dispatcher’s window is a precious time period during which dispatchers may help bystanders make a dramatic difference in victim’s outcome. We previously demonstrated that the ALERT algorithm, a simple and effective compression-only phone CPR protocol, has the potential to help bystanders initiate CPR. However, using the ALERT protocol requires knowledge acquisition and continuous dispatcher’s training. The present study compares the cost-effectiveness of e-learning training process versus classical ex-cathedra courses.

Methods

All dispatchers from Liege 112 dispatching centre (n = 35) were prospectively distributed into 2 training groups: e-learning versus ex-cathedra. We used a form to evaluate the acquisition of knowledge and we evaluated the costs of two training methods in order to obtain a cost-effectiveness ratio ICER (Incremental Cost-Effectiveness Ratio) to objectify their efficiency.

Reference


Results

Expenses for ex-cathedra and e-learning methods were similar as concern the early implementation of the protocol. However, further training was considerably less expensive using the e-learning process (2200 € vs.150 €). Both types of training were effective in terms of learning gain (51.0% vs. 46.7%; p=NS), but ICER revealed that the ex-cathedra courses required an additional cost of 19,6 € to earn 1% of quality adjusted student education.

Conclusion

Compared with the method ex-cathedra, e-learning for teaching the ALERT protocol provided in the dispatching 112 Liege is efficient.

Contacts

Corresponding author:
Alexandre Ghuysen
Tel.: +3243667729 ; fax: +3243667723
E-mail address: a.ghuysen@chu.ulg.ac.be