A randomised controlled comparison of video versus instructor-based compression only life support training.

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Abstract

BACKGROUND AND AIMS: Sudden cardiac deaths remain a major health problem worldwide. Most of these cases generally involve out of hospital cardiac arrest, making the role of bystander resuscitation very crucial. In the developing countries, illiteracy and scarcity of health professionals is a great barrier to cardiopulmonary resuscitation (CPR) training. Video-based CPR training can offer an easily accessible modality in these situations. Hence, this study was conducted with an aim to assess the efficacy of video-based training in comparison to the traditional instructor-based CPR training in layman.

METHODS: This prospective cross-over observational study included 109 undergraduate university students attending voluntary resuscitation training and were randomly divided into two groups of video-based demonstration (VBD) and instructor-based demonstration (IBD) of compression only life support (COLS). They were then assessed for psychomotor skill development (Laerdal Simpad Plus Q-CPR) and perception about the quality of training methodology as primary and secondary objectives, respectively.

RESULTS: Population characteristics were similar in both the groups. In the VBD, scene safety was performed by 95.2% and call for help by 97.6%, and by 76.1% each in the IBD group (P < 0.05). Response to compression time (RCT) was significantly shorter in VBD (35 ± 9 sec) as compared to IBD (54 ± 14 sec) (P < 0.001). However, the proportion of participants performing response check, correct site identification, and other parameters were comparable.

CONCLUSION: Video-based COLS training significantly decreased the RCT by 35% compared to traditional instructor-based training. However, other features of high-quality CPR remain comparable.

KEYWORDS: Compression only life support; cardiopulmonary resuscitation; simulation; training technique

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