

Discussion and conclusion: The study demonstrates the impact of BLS workshops for teaching and learning. The 50-min workshop with a focus on SCK affected teacher in-class behaviour, which significantly improved student outcomes.

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AP076

Is it enough to watch a short ad hoc video to learn how to use an automated external defibrillation?

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Purpose: The aim of this study is to evaluate in young footballers the learning effect of viewing an ad hoc video about why and how to use an automated external defibrillator (AED).

Material and methods: A prospective, analytic and observational study that included 54 young footballers (age 12–33 years) was conducted. In phase 1 (P1) we assessed CPR knowledge by a questionnaire. After that, a video made ad hoc for this study was shared in the social media during a week. In phase 2 (P2) the sample was split in two groups of 27 subjects. G1 participants watched the video in the social media and G2 participants didn't receive any information about AED and were considered controls. One week later, participants' skills on AED were evaluated using a standardised test scenario.

Results: In P1, 69% of the participants reported that they know what an AED is. However, 81.5% of them acknowledged that they do not know how to use it. Seventy-four percent would try to use the AED if faced with a situation that would require it. All participants were able to perform the AED procedure in a manikin, with an average time of 85 s in G1 and 83 in G2. Incidence of error was 50% in G1 and 62% in G2.

Conclusions: Short videos shared in social media may be useful to make the youngsters aware of the importance of recognition a cardiac arrest and also help them to know how to use an AED. Openly available and potentially viral videos may be good basic life support teaching materials, especially in young people who can share them in the social media.

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AP077

Effects of two teaching interventions on nursing students' acquisition of competence in ECG interpretation



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Purpose: Nurse ability to recognise patient arrhythmias could contribute to preventing in-hospital cardiac arrest. Research suggests that nurses and nursing students lack competence in electrocardiogram (ECG) interpretation. The aim of this study was to compare the effects of two training strategies on nursing students' acquisition of competence in ECG interpretation.

Materials and methods: A controlled randomised trial with 98 nursing students. Divided in groups of 12–16, participants were randomly allocated to one of the following 3-h teaching intervention groups: 1) traditional instructor-led (TILG), and 2) flipped classroom (FCG). Participants' competence in ECG interpretation was measured in terms of knowledge (%), skills (%) and self-efficacy (%) using a specifically designed and previously validated toolkit at pre-test and post-test. Two-way MANOVA explored the interaction effect between 'teaching group' and 'time of assessment' and its impact on participants' competence. Within-group differences at pre-test and post-test were explored by carrying out paired *t*-tests. Between-group differences at pre- and post-test were examined by performing independent *t*-test analysis.

Results: There was a statistically significant interaction effect between 'teaching group' and 'time of assessment' on participants' competence in ECG interpretation ($F(3,190)=86.541$, $p=0.001$; Wilks' $\Lambda=0.423$). At pre-test, differences in knowledge (TILG = 35.12 ± 12.07 ; FCG = 35.66 ± 10.66), skills (TILG = 14.05 ± 10.37 ; FCG = 14.82 ± 14.14), self-efficacy (TILG = 46.22 ± 23.78 ; FCG = 40.01 ± 21.77) and all other variables were non-significant ($p > 0.05$). At post-test, knowledge (TILG = 55.12 ± 14.16 ; FCG = 94.2 ± 7.31), skills (TILG = 36.90 ± 16.45 ; FCG = 86.43 ± 14.32) and self-efficacy (TILG = 70.78 ± 14.55 ; FCG = 79.98 ± 10.35) had significantly improved, regardless of the training received ($p < 0.05$). Nonetheless, participants in the FCG scored significantly higher than participants in the TILG in knowledge, skills and self-efficacy ($p < 0.05$).

Conclusion: Flipping the classroom for teaching ECG interpretation to nursing students may be more effective than using a traditional instructor-led approach in terms of immediate acquisition of competence in terms of knowledge, skills and self-efficacy. Further research on the effects of both teaching strategies on the retention of the competence will be undertaken.

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