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A Comparison of Skill Retention from Two Instructor-Led BLS CPR Courses

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OBJECTIVE

CPR skill retention is vitally important on successful resuscitation outcomes. This study examined college students' retention of Adult CPR skills 6 months following participation in an instructor-led CPR course presented in two different formats.

SETTING AND DESIGN

Adult CPR skill retention 6 months after certification was examined in college students enrolled in a Nursing or Exercise Physiology program who completed an instructor-led BLS CPR course with an American Heart Association (AHA) instructor. Nursing students completed their in-person cognitive portion of the course in approximately 2 hours, followed by a 2-hour skill review and hands-on skill assessment. Their entire course and subsequent Adult BLS certification were completed from start to finish in one 4-hour setting. Exercise Physiology students completed their in-person cognitive portion of the course, repeated skill review and feedback, and skill assessment in three, 50-minute class sessions per week, over a 3-week period, encompassing approximately 7 total hours for their BLS certification.

PARTICIPANTS

A total of 20 Nursing and 13 Exercise Physiology students enrolled in a private university who completed a BLS CPR course with an AHA certified instructor were requested to perform the skill of Adult CPR on a Prestan® feedback manikin 6 months after certification. Students were individually evaluated by their original course instructor using a checklist of 10 performance identifiers. Students received no feedback during the skill, other than what was provided by the manikin itself regarding ventilations (chest rise) and compressions (rate and depth). Since this was a skill retention study, students were identified by their known enrollment in the CPR courses at the university and contacted in-person by their course

instructor. No student was given advanced notice of the study or skill practice after initial certification, ensuring all students were being evaluated under the same conditions. The study was given exempt approval by the IRB board at the university.

MAIN OUTCOME MEASURE

Student's successful completion (as determined by the AHA certified course instructor) of each performance identifier were evaluated. The total number of performance identifiers successfully completed ("yes" responses) were compared between Nursing (n=20) and Exercise Physiology (n=13) students.

RESULTS

A two-tailed t-test was performed to compare total number of performance identifiers successfully completed ("yes" responses) in both groups. Significance was set at $p < 0.05$. Performance indicators were expressed as Mean \pm Std Dev. Nursing "YES" responses were significantly different from Exercise Physiology responses. (16.5 ± 4.60 vs. 9.6 ± 3.75).

CONCLUSION

Nursing students displayed a higher number of successful performance identifiers than Exercise Physiology students, suggesting higher frequency training sessions for certification may not be a primary factor to CPR skill retention.

KEY WORDS: *CPR Retention, Cardiac Resuscitation Outcomes, BLS, Nursing, Exercise Physiology*

REFERENCES

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