Abstract:
Introduction: Maintaining proficiency in cardiopulmonary resuscitation is a professional obligation of all nurses; but an ongoing challenge as it is a skill not often used in practice. In 2008, the American Heart Association (AHA) produced a self-directed learning kit shown to yield learning outcomes equal to or better than that obtained with traditional instructor led courses. When released, the AHA recommended the kit only for individuals seeking recertification. This study examined differences in learning outcomes of individuals who used the kit for recertification and those who used it for initial certification.

Method(s): All subjects used the kit in a wholly self-directed way to either learn (n=39) or refresh (N=49) CPR knowledge and skills. We videotaped them as they completed the learning activities. When ready for the performance test, each subject presented to an AHA certified instructor who assessed CPR skills as they were performed on a ResuciAnne manikin. The outcome measures included the performance ratings of the instructor, performance data captured by a laptop connected to the manikin, and subject receptivity to self-directed learning.

Results: The percentage of initial certification and recertification learners assessed on overall performance by AHA certified instructors as having passed was equivalent. Multivariate analyses of variance on the performance data obtained directly from the manikin indicated no significant differences between the two learner groups. Receptivity to learning via self-directed learning was equally high in both groups of learners. Analyses of the videotapes revealed that bag mask ventilation and delivering compressions of adequate depth were the most problematic for learners in both groups.
**Discussion & Conclusions:** These results add to the evidence that self-directed learning of CPR skills is effective. Use of the kit offers the advantages of convenience (learner choice of time and location; only needs access to a computer with internet capability) and unlimited opportunities for reinforcement of learning (on-line component available for a year; manikin has good re-use life). It offers a venue for the nurse to decide when and how often to refresh to maintain proficiency.

**Abstract History:**
This abstract has not been presented or accepted for presentation in whole or in part at the SNRS or other scientific meeting.

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