Perceived Confidence In Airway Management and Ventilation Skills Based on Initial Certification Programs

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Introduction

Maintaining an airway and ensuring effective ventilations is a corner stone to patient care. For those in pre-hospital emergency medical training the successful combination of knowledge and kinetic skills is essential. Traditional pre-hospital instruction has consisted of lecture and skills practice utilizing manikins. Recently selected pre-hospital education programs have begun utilizing human cadaver based workshops to reinforce skill sets for those in initial training.

Methods

Our research efforts were developed as a quality assurance and improvement exercise which was distributed and collected electronically. No biographical data was request.

Requested information was collected by electronic survey. Distribution was achieved by chain-referral and snowball collection techniques.

The survey offered a Likert scale selection to record the participants perceived airway management confidence levels. A 1 to 5 rating was assigned for selection with each question posed. A rating system boundary of "1" indicated no confidence through "5" represented exceptionally confident.

Results

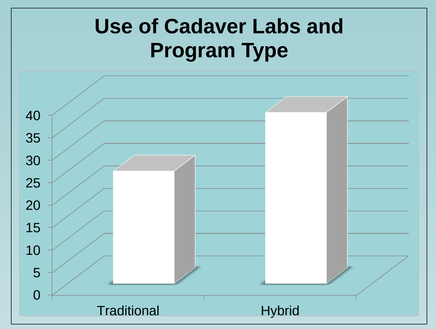

Figure 1: Based on survey results: 25% of responders indicated that they had a *traditional* initial certification course utilizing cadavers.

38% of responders had a *hybrid* certification course stated that they utilized cadavers.

Perceived Confidence Levels

Survey Criterion	Use of Cadaver Lab during Initial Certification Class	
	Yes	No
Airway Management	4.55	2.38
Ventilation Skills	4.55	2.31
General Anatomy	4.27	1.91

Conclusion

- **Students who participated in a cadaver lab during initial certification course had a greater perceived confidence in basic airway management.**
- **Students who participated in a cadaver lab during their initial certification course had a greater perceived confidence in airway management and ventilation skills.**
- **Students who participated in a cadaver lab during their initial certification programs had a greater perceived confidence in general anatomy.**

Significance

Initial certification programs provide the foundational knowledge for patient care in Emergency Medical Services. Foundational programing has been developed to introduce and train compulsory knowledge and kinetic skills, but should also improve practical confidence. Students who were exposed to cadaver based workshops had a higher self-perception of confidence. Further study and discussion is needed to determine:

- **If cadaver labs can be further integrated into initial certification programs?**
- **How initial certification programs can gain routine access to human cadaver labs?**