Confidence in Prehospital Pediatric Emergency Care Improves with the Handtevy System



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Background

- 35% of pediatric patients experience prehospital medication errors
- Handtevy is a prehospital tool used to rapidly and accurately calculate pediatric dosing*

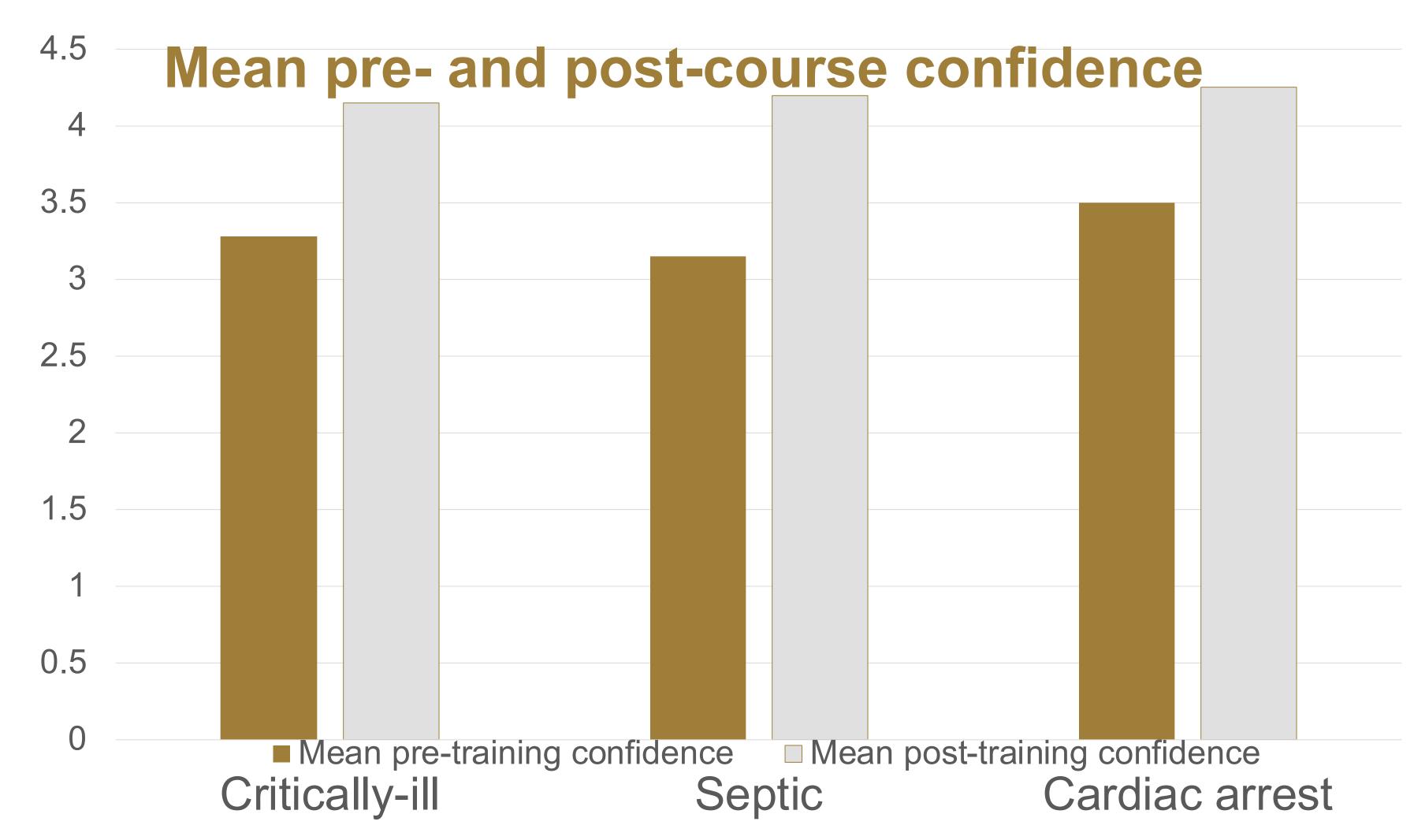
Methods

- Pre/post observational study of Randolph County EMS in NC
- Handtevy System introduced in a 4-hour mixed lecture/simulation session
- Confidence scale surveys assessed confidence in caring for a "critically-ill child," "a septic child," and "a child in cardiac arrest"
- Scale of 0-5, with 0 being "no confidence" and 5 being "extremely confident"
- Descriptive stats performed and 95% confidence intervals were determined

Results

- 40 surveys completed
- 100% of participants rated the course a 4 or 5/5 at improving pediatric knowledge and skills
- Many requested similar future trainings

Provider Confidence			
	Mean Pre-Training Confidence	Mean Post-Training Confidence	Change in Confidence
Critically-III	3.28/5 (95%CI 3.03-3.52)	4.15/5 (95%CI 3.96-4.33)	+0.87
Septic	3.15/5 (95%CI 2.91-3.39)	4.20/5 (95%CI 4.00-4.39)	+1.05
Cardiac Arrest	3.50/5 (95%CI 3.24-3.76)	4.25/5 (95%CI 4.05-4.45)	+0.75



Conclusion

- The mixed didactic and simulation in-service improved provider confidence
- The training was well-received and EMS providers requested similar trainings in the future





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