



# Evaluation of a Mechanical Ventilator Education Program for Intern Physicians in an Intensive Care Nursery

William Bucher, Brian Glynn

Department of Pulmonary Care, Thomas Jefferson University Hospital, Philadelphia PA

## BACKGROUND

Thomas Jefferson University Hospital is a large urban Academic Medical Center with a level III Intensive Care Nursery (ICN). A new group of pediatric interns rotate through the ICN every year and receive limited education on mechanical ventilation. We developed a live, one hour training session performed by a Respiratory Therapist and a Respiratory Challenge Test to be completed by the physicians before and after each session. Clinical training was defined as routine training acquired during daily rotation in the ICN. We hypothesized that classroom and clinical training would be more effective than clinical training alone.



## METHOD

After a one week clinical rotation, fourteen Pediatric Interns received a ten question, multiple-choice, written Respiratory Challenge Test followed by a one hour training session on mechanical ventilation. After the training session, the physicians received the same Respiratory Challenge Test and results were compared.

## RESULTS

The average test score after clinical training alone was 57.1%. The average score following clinical coupled with classroom training was 72.9%. There was a 27.6% increase in test results following the one-hour training session ( $p= 0.0007$ ).

## CONCLUSION

The development of a live, one hour classroom training session performed by a Respiratory Therapist has been proven to significantly improve test scores when compared to clinical training alone. We believe that this program will improve patient quality and safety in our Intensive Care Nursery.

