INTRODUCTION

The use of simulation-based learning systems to assess and evaluate paramedics is novel. Using a combination of on-line curriculum, the City of Pittsburgh, Bureau of EMS Difficult Airway Algorithm and simulation-based workshops, we were able to train and evaluate 174 City of Pittsburgh Paramedics in management of a variety of difficult airway scenarios. The goal was to assess the comfort level and working knowledge of the paramedics using the Bureau of EMS Difficult Airway Management Algorithm. This was accomplished by comparing pre-course and post course surveys.

METHODS

All of the training took place at The Peter M. Winter Institute for Simulation Education and Research (WISER). The training course included three hours of self-paced on-line curriculum. The workshop component included review of the Bureau of EMS Difficult Airway Algorithm, a review of difficult airway techniques and rescue airways devices. Each paramedic crew was given a series of six difficult airway scenarios (two pre-course scenarios and four post course scenarios). To maintain a high continuity of instruction, the paramedic instructors were guided by on-line curriculum that allowed for greater uniformity throughout the program. Assessment of the paramedic’s performance was traced through pre-course and post course surveys utilizing a web-based program completed by each trainee.

RESULTS

All of the training took place at The Peter M. Winter Institute for Simulation Education and Research (WISER). The training course included three hours of self-paced on-line curriculum. (See Table A). An additional four hours of simulation-based training exercises and scenario training was conducted at WISER. The workshop component included review of the Bureau of EMS Difficult Airway Algorithm (See Table B), a review of difficult airway techniques and rescue airway devices. Each paramedic crew was given a series of six difficult airway scenarios (two pre-course scenarios and four post course scenarios). To maintain a high continuity of instruction, the paramedic instructors were guided by on-line curriculum that allowed for greater uniformity throughout the program (See Table C). Assessment of the paramedic’s performance and attitudes was traced through pre-course and post course scenarios and surveys.

CONCLUSION

Using a combination of on-line curriculum and simulation-based training exercises, we were able to evaluate performances and attitudes of paramedics based on knowledge and technical skills in the Difficult Airway Management Algorithm. The analysis of scenario data and clinical experience is also being reviewed.