Respiratory failure or uncontrolled hemorrhage

Amina Merchant
Vanderbilt University, USA

Over half of prehospital deaths in low-income countries are the result of airway compromise, respiratory failure or uncontrolled hemorrhage; all three of these conditions can be addressed using basic first aid measures. For both hospital personnel and laypersons, basic trauma resuscitation training in modified ABCD (airway, breathing, circulation, disability) techniques can be easily learned and applied to increase the number of first responders in Mozambique, a resource-challenged country. A trauma training session was administered to 100 people in Mozambique: Half were hospital personnel from 7 district medical centers and the other half were selected laypersons. This session included a pre-test, intervention, and post-test to evaluate and demonstrate first response skills of airway management, hemorrhage control, and cervical spine precautions. Eighty-eight people completed both the pre- and post-tests. Following the educational intervention, both groups demonstrated an improvement in test scores. Hospital personnel had a mean post-test score of 60.08% (SD=17.21, N=43) and community laypeople had a mean score of 50.92% (SD=15.61, N=45). A t-test for equal variances demonstrated a significant difference between the post-intervention scores for the two groups (p=0.01). All 100 participants were able to open an airway, externally control hemorrhage, and transport a patient with appropriate precautions. The trauma training session served as new information that improved knowledge and skills for both groups, and increased the number of capable responders in Mozambique.

Biography

Amina Merchant is an Instructor in Surgery at Vanderbilt University. She completed medical school at the University of Illinois and a general surgery residency at Rush University and Cook County Hospital. She has worked on health projects in Mozambique, Pakistan, and India. Her goals include increasing access to health care as well as develop trauma training to increase capacity in developing nations.

amina.i.merchant@vanderbilt.edu