

## 2015 AT Educators' Conference Model Practices Showcase

### Charles-Liscombe RS; Mount St. Joseph University (Cincinnati, OH) The AT Haunted House: Structuring a high fidelity simulation activity

**OBJECTIVE:** At the end of this showcase, attendees will be able to: 1) develop an objective structured clinical exam (OSCE) using inexpensive moulage/special effects techniques and simulated patients (SPs) to add realism to laboratory and simulation learning environments; 2) consider the role of students in the learning process through creative expression, peer-evaluation, and self-evaluations; 3) implement simulated emergency, assessment, and treatment scenarios for upper-level AT students.

**OVERVIEW:** The use of high and low fidelity simulation and SPs have been implemented in a variety of health professions to instruct and evaluate clinical skills<sup>1</sup>. Athletic training educators have advocated for its use in didactic as well as clinical education settings<sup>2,3</sup>. The use of medical moulage<sup>4</sup> provides opportunities for athletic training educators to recreate realistic sensory experiences of specific clinical scenarios in order to prepare students effectively and identify areas for remediation. First time users, however, may be unfamiliar with ways of implementing this teaching method into their curriculum. Professional special effects makeup<sup>5</sup> and commercial moulage kits<sup>6</sup> are available to create emergency medicine and clinical exam scenarios for the athletic trainer, but it is just as easy to develop these experiences with low cost household items and some creativity.

The AT Haunted House, a multi-station pre-season orientation activity was implemented to assess and refine upper division AT students' clinical decision making, team work and leadership, communication, and emergency response skills on 6 athletic injury/illness scenarios:

- Heat Illness;
- mTBI with facial laceration;
- sudden cardiac arrest and EMS hand-off;
- Hypoglycemia and Nutritional Counseling;
- Open Tibia/Fibula Fracture with Shock ;
- Anaphylaxis and respiratory distress.

AT students were actively involved in developing the case descriptions, the signs and symptoms associated with each scenario and the make-up applications and costuming required for each scenario. Each scenario was videotaped for review with students following the sessions. Students reported that being involved in case development and delivery as SPs increased their understanding of the conditions and appropriate/inappropriate responses to each scenario. Students performing in the scenarios reported increased confidence and reduced anxiety in managing the illnesses in a controlled environment. Preceptor evaluations revealed areas in need of remediation within the AT students' emergency action plan implementation and clinical skills.

#### Simulation Debriefing Questions –

1. What did the group providing care do well?
2. What information provided by the patient assisted the team in determining a plan of action?
3. What areas did you notice the group providing care were unsure of or hesitant in their actions?
4. What skills were performed that you did not expect?
5. What skills were not performed that you expected?
6. How was the communication between the health care providers and with the patient? How would you suggest they improve?

Video highlights of the students and faculty members experiences as 1) creators of the makeup effects and actors in the scenes, 2) responders and team members, and 3) observers/evaluators will be shown to demonstrate the realism and impact of these learning activities. Scoring rubrics and evaluation criteria will be discussed.

## **Materials Required:**

### **Heat Illness:**

Equipment Needed: Immersion Tank, helmet, shoulder pads, jersey, stir stick, cold towels, ice bath, rectum model, rectal thermometer, 2 meter leads, sheet, towels, cold beverage,

Make up Prep: Red face, moist glossy skin/sweat, wet hair,

### **Forehead Laceration and Concussion**

Equipment Needed: Moulage kit (laceration appliance), fake blood, towels, sideline kit, gauze, gloves, pen light, roller gauze, steri strips, SCAT 3 palm card.

Make up Prep: Skin wax, red make up, fake blood gel, eye brow.

### **Sudden Cardiac Arrest, CPR, AED, O2, and EMS Hand-off**

Equipment Needed: CPR Mannequin, AED, BVM, O2, Non-rebreather mask, sideline equipment

Make up Prep: None – SP to enact role as EMT/Paramedic with kit,

### **Hypoglycemia and Nutritional Counseling**

Equipment Needed: glucometer, test strips, lancets, glucose tablets, finger prick model and simulated blood with elevated BG, Gatorade bottle, foods (granola bar, hard candy, fruit snacks).

Make up Prep: bluish white cyanosis, clammy cool skin,

### **Open Tibia/Fibula Fracture with Shock**

Equipment Needed: open fracture Moulage appliance, adhesive, blood gel, gauze pads, towels, gloves, compression roller gauze, splint bag, O2 tank, NRB mask, wound care equip, cleaning supplies.

Make up Prep: bluish white cyanosis, clammy cool skin, Moulage appliance, syringe filled with “blood” gel.

### **SimMan – Anaphylaxis and Respiratory Distress**

Equipment Needed: Rescue Inhaler/albuterol, long acting asthma medication, nebulizer, Epi-pen, peak flow meter, stethoscope, O2 tank, nasal cannula.

Make up Prep: bluish white cyanosis, clammy cool skin, athletic clothing,

## **References**

1. Wilson L. Rockstraw L. Human Simulation in Nursing and Health Professions. 2011. New York, NY: Springer Publishing.
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3. Doherty-Restrepo J. Education literature: current literature summary. Athl Train Educ J; 2011;6(1):53-55.
4. Merica B. Medical Moulage: How to Make Your Simulations Come Alive. 2012. Philadelphia, PA: FA Davis.
5. BenNye Moulage Training Kit for Emergency Reenactment Professionals. Available for purchase at Stage Makeup Online [www.stagemakeuponline.com](http://www.stagemakeuponline.com)
6. Simulaids, Inc. Trauma Moulage Kits. Available for purchase at [www.simulaids.com](http://www.simulaids.com)