Moulage: Mannequin Safe Tips and Tricks

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Objectives

- Discuss the value of realism and the use of moulage in simulation.
- Discuss methods of creating simulated injuries and medical conditions.
- Discuss sources of moulage materials and resources.

Every simulation session must have enough realism for the participants to become fully engaged in the scenario. They must believe and act as if the patient simulator is someone for whom they are responsible and must provide appropriate care. Having a mannequin that blinks and speaks is wonderful, but for many participants that is not enough to overcome the sense of playacting.

Hwang & Bencken, 2008
Moulage....

A French term that means casting or molding; the art of applying mock injuries for the purpose of training healthcare personnel.

Cornele, J. (2015)

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Moulage

- Moulage
  - The artistic technique of incorporating realistic cues, such as wounds, perspiration, blood, or therapeutic devices, to increase the “psychological fidelity” of a simulation.

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Considerations

- Alignment with objectives
- Participant considerations
  - Level of experience
  - Environment
  - Inter-professional education
- Subject
  - Human
  - Mannequin
- Knowledge
  - Physiology of the situation
  - Mechanism of injury
What do you need?

- Distilled water
- Dish soap—assorted colors
- Powder make up
- Cream make up
- Shaving cream
- Finger paints (red, yellow, green, black)
- Food coloring
- Fake blood
- Bubble wrap
- Pre-made wounds
- Pictures (laminate first)

Advanced considerations
- Modeling wax
- Toupee tape
- Smooth on products
- Gel Effects

Moulage Supplies cont...

- Mixing Basics
  - Secure locking containers
  - Spoons/tongue depressors
  - Leur Lock syringes
  - Cath tip syringes
  - Drainage bags for IV fluids
  - Funnels
  - Measuring cups
  - Mixing cups

Wounds
**Medical Issues**

- Edema
  - Purchase
  - Make
    - Hot cereal
    - Memory Foam
- Rashes, ulcers
- Lines
- IVs
- Art/CVP
- Chest Tubes

**Body Fluids**

- Urine
- Stool
- Vomit
- Nasal drainage

**Recipe Books**

Laerdal

Laerdal.com/usa/sun/ppt/recipebook.pdf

Moulage for Manikins: Or, Cooking for Real Dummies

*HealthPartners Clinical Simulation & HealthPartners Institute does not endorse using food-based moulage products with mannequins.*
### Food products?

- **Possible Exceptions:**
  - No direct contact with mannequin
    - Edema: Cream of wheat/oatmeal in secured bags covered with nylons
    - Coffee grounds added to a fluid presented in a basin
  - Cornstarch for thickness
  - Rice crispies/broken chips in a baggie for crepitus
  - Plain gelatin with red food coloring for clots

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### Other Aspects of Realism

- Medications
- Clinical Supplies
- Equipment
- Wardrobe, wigs & other props

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### Wardrobe, Wigs, & other Props

- Clothing
  - Garage sales
  - Good will
  - Staff
- Wigs
  - Halloween stores
  - Amazon/ebay
- Other props
  - Piercings
  - Tattoos
  - ?
Show me the money!!!

- Use expired materials (ie. Medications, defib pads)
  - Empty according to MPCA Standards
- Repackage materials (ie. Cath kits, central line kits)
  - Take photos of kit contents & arrangement
- Predetermined disposal site during the simulation
- Make friends with ancillary departments (ie. Pharmacy, Biomed, Materials)
- Refill & Reuse... Reuse... Reuse

Clean Up

- Adhesive & Make Up
  - “White” eraser
  - Powder- Talc
  - Goo Gone
  - Mild soap & water
- Ink
  - 10% Benzyl Peroxide Cream
  - Light source 10 inches from area

References