Human Patient Simulation

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Human Patient Simulation

Human Simulation Module
- Drs. Ishac, Welch, Robinson & Cumpston
- 10 possible Human Patient Simulation modules
- View online overview (link on Resources page)
- Sign-up online (SRS) by Fri Aug. 5th, 10pm
- North Hospital, 2nd Floor, B218 (staging area)
- Held Mon & Tue Aug 8-9th, 12:30pm-5pm (30 min simulation session followed by 30 min debriefing)
- Team groups of 5-6 for simulation module
- 5 points towards your Pharmacology grade
- Presented with 1 of 10 modules for simulation
- Reinforce concepts from class

Human Patient Module Cycle
- 0-5 min: Familiarize with manikin equipment, practice and evaluated on vital sign measurements.
- 5-25 min: Participation in simulation module (one of 10 modules)
- 25-30 min: Short debrief on performance as a health professional team
- 30-60 min: Formal debrief of two groups from different modules. Lead physician and reporter will present group case scenario and together with their team members answer questions and defend their decisions during the simulation module.

Human Simulation Grade

5 Points Total
- 1 Point: Accuracy of vital sign measurements
- 1 Point: Performance of health professional team
- 1 Point: Correct diagnosis of condition
- 1 Point: Appropriate pharmacotherapy application
- 1 Point: Participation in debrief session

Human Patient Simulation - Manikin
Potential Human Simulation Roles

1. Lead physician
2. Secondary physicians
3. Pharmacist
4. Nurse
5. Physical assessor
6. Laboratory specialist
7. Reporter
8. Patient companion
9. Faculty facilitator

Pharmacotherapy – Drug Toolbox

- Bethanechol
- Atropine
- Phentolamine
- Epinephrine
- Diphenhydramine
- Labetalol
- Succinylcholine
- Bupropion
- Disulfiram
- Hydroxyzine
- Methadone
- N-acetyl cysteine
- Naltrexone
- Varenicline

- Neostigmine
- Benztropine
- Propranolol
- Norepinephrine
- Dopamine
- Fenoldopam
- Rocuronium
- Buspirone
- Flumazenil
- Lorazepam
- Morphine
- Naloxone
- Thiamine

- Physostigmine
- Pralidoxime (2-PAM)
- Metoprolol
- Clonidine
- Haloperidol
- Phenoxybenzamine
- Acamprosate
- Diazepam
- Normal saline

Vital Signs (VS) – LCD Monitor

Wave form
- ECG
- Pleth
- ABP
- PAP
- CO₂
- NBP

Values
- HR
- SpO₂
- Temp
- ABP
- PAP
- RR
- CO₂

LCD Monitor Abbreviations

- PAP: Pulmonary artery pressure
- ABP: Ambulatory Blood Pressure
- NBP: Non invasive blood pressure
- Pleth/SpO₂: Pulse oximetry (plethysmograph), O₂ saturation %
- RR: Respiratory rate
- HR: Heart rate
- ECG: Electrocardiograph
- CO₂: End-tidal CO₂ measurement (capnography)
- Temp: Temperature (F or C)

Laboratory tests and scans

- VS – Heart rate (HR), detection sites