The Impact of Human Factors on Resuscitation

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CRM
Taking CRM back to its roots

A model for optimizing performance

Taking Human Factors to the next level
Crew Resource Management

Crisis Resource Management

MedTeams®

Medical Team Training

TeamSteppps®
Communication
Teamwork
Culture
Health & Well-being
Awareness

TEAMSTEPPS

- Team Huddles
- Debriefs
- Feedback
- Two-Challenge Rule
- DESC Script

- SBAR
- Check-Back
- Handoff
- Call-Out
- Cross-Monitoring
Fragmented, decontextualized, and incomplete
“Interaction of pilot *workload* with errors, vigilance, and decisions”

“...factors affecting group *process* and aircrew *performance*.”
“...task management and decision making under stress.”

A better definition of CRM
“The use of all available resources, equipment, information and people to achieve safe and efficient flight Operations”

The use of all available resources, equipment, information and people to achieve *safe, efficient, and effective RESUSCITATION*
1. Prioritize
2. Manage
3. Share
Resuscitate
Differentiate
Communicate
2. Manage

Control Your physiology

BEAT THE STRESS, FOOL!

BREATHE
TALK
SEE
FOCUS
BTSF

Breathe
Inhale for 4 seconds

Hold for 4 seconds

Exhale for 4 seconds

Hold for 4 seconds
Talk
Instructional or Motivational
Short
Specific
Positive

See
Vivid Imagery
Focus
2. Manage

- Control Your physiology
- Refine Your Skills
Situation Awareness
Perception

↓

Comprehension

↓

Projection
1. Build active systems to promote awareness
Resuscitation
Circle of
Awareness
2. Transform the System into a Habit
Cue → Routine → Reward

Behavior Automaticity vs. Number of Repetitions

Habit Line
Deliberate practice
2. Manage

- Control Your physiology
- Apply Your Skills
- Use Your Tools

Cognitive Offloading
3. Share

Leadership
3. Share

Leadership

Communication
3. Share

Leadership → Communication → Mental Model

Mental Models
Ventilator
1. Equipment

2. Knowledge

3. Roles and responsibilities
Novice vs. Expert
What do mental models do?
Anticipate, predict, coordinate
1. Prioritize

2. Manage

3. Share
Performing better!
1. Prioritize
2. Manage
3. Share

That others may live...
#mindasaweapon

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