Preparing for High Acuity Events – Stress Inoculation Training

Reference to abstract or paper:
Study is still in progress.
Discussed in part here: https://emcrit.org/podcasts/chris-hicks-fog-of-war

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Description of Innovation:

What problem does this innovation solve?
Stress can have a profound impact, both positive and negative, on performance. Stress inoculation training is a paradigm trialed in the military and designed to habituate team members to the deleterious effects of acute stress on performance during high acuity, complex, high stress clinical events.

The setting of innovation
Simulation-based intervention, inter-professional education: involves EM and GenSx residents, EM RNs and RTs.

The resources required to make this happen
NEARLY ENDLESS. A multi-professional team to coordinate inter-professional simulation sessions, research associates to coordinate the investigative arm of the project, collaborators and confederates from nursing, respiratory therapy and our local simulation centres.

Objective measurements of acute stress include heart rate variability, salivary cortisol, state-trait anxiety index, two-step cognitive appraisal tool, and team performance using an anchored behavioural rating scale.

What educational theories or conceptual frameworks does it utilize?

- State-dependent learning
- Transfer-appropriate processing
- Reflective practice

References:

https://www.ncbi.nlm.nih.gov/pubmed/9547044
https://www.ncbi.nlm.nih.gov/pubmed/17518835
https://www.ncbi.nlm.nih.gov/pubmed/20604855
https://www.ncbi.nlm.nih.gov/pubmed/21808212
https://www.ncbi.nlm.nih.gov/pubmed/22831965

BOTTOM LINE:

Stress inoculation training is believed to be an important component of psychological skills training, inter-professional team training, and human factors for complex medical events. Debriefing teams based on emotions and their impact on performance poses unique challenges for simulation educators.