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The Effect of Stress Inoculation Training on Endotracheal Intubation

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**Background**

- Stressful situations pervade emergency medicine. Many studies demonstrate the deleterious impacts of stress on a physician’s immediate actions and lasting mental health, yet it is well-documented in the literature that preparedness can help mediate stress (1,2).

- Stress inoculation training (SIT) is utilized to prevent adverse stress response (3).

- SIT theory teaches coping skills and defensive thinking to actively mitigate the negative physiological effects that occur during stressful events. This training involves a conceptualization phase, skills training phase and application phase (4,5).

**Objective**

- Evaluate the effect of stress inoculation training (SIT) on endotracheal intubation performance of novice intubators.

**Methods**

- The study consists of a population of medical students without prior airway training randomly assigned to control and intervention groups.

- Both groups will receive a didactic lecture on airway management followed by a brief intubation attempt on a standard dummy.

- The experimental group will subsequently receive a lecture on the principles of SIT where they learn to use focused intervention shown to reduce the physiological effects of stress (Figure 1).

- All participants will then intubate the standard dummy in three different scenarios of varying environmental stressors.

- To evaluate the lasting effects of SIT, both groups will return in a month and repeat the intubation scenarios.

**Results**

- Due to COVID-19 restrictions pilot testing has been postponed until Fall 2020.

- The main outcome will be the participant’s ability to successfully perform the procedure under stressful conditions.

- Secondary outcomes will be the number of attempts and time required to successfully intubate.

- Participant’s post event response to the Perceived Stress Questionnaire will also be analyzed.

**Conclusions**

- The study evaluates the teaching of SIT on emergency airway management.

- This application of SIT will not only contribute to the literature on stress management, but also enhance patient safety and better prepare medical students for career resiliency.

**References**