

Emergency Medicine Resident Perceptions of a Novel Curriculum: “Advanced Mental Performance in the Emergency Department (AMPED)”

Matthew Aronson MD¹, Timothy Henderson MD¹, Elise O. Lovell MD^{1,2}, and M. Kelly Williamson MD^{1,4}

¹AAH Christ Medical Center Dept. of EM; ²University of Illinois Chicago Dept. of EM; ³Hennepin County Medical Center Dept. of EM; ⁴Northwestern Medical Center Dept. of EM

Introduction

Background

Emergency medicine (EM) physicians frequently encounter stressful clinical situations. The deleterious effects of stress on cognitive, physical and emotional performance are well-documented in other high-stakes professions. Other fields, such as the military and professional athletics, incorporate mental skills training to enhance performance under pressure and overall wellbeing. Such programs are notably absent in medicine.

Objectives

The goal of this study was to assess EM resident perceptions of a novel mental skill training curriculum: Advanced Mental Performance in the ED (AMPED).

Methods

The AMPED curriculum is a multimodal didactic experience designed to optimize EM resident performance across four domains: Stress, Mindfulness, Team Dynamics, and Decision-Making (see Figure 1). The curriculum was incorporated into required weekly didactic conferences at one EM residency, Advocate Christ Medical Center Emergency Medicine Residency Program. Four interactive lectures were given during the 2019-2020 academic year. As part of the didactic lectures, directed psychological skills training was also included, with the goals of optimizing cognitive control and emotional regulation and mitigating performance degradation. EM resident perceptions of the curriculum were assessed at the conclusion of the curriculum using SurveyMonkey ©, an online survey application. The survey included four basic questions:

1. How important is it to include education about mental performance for optimizing your residency training?
2. How relevant is the topic of mental performance to the resident physician?
3. How comfortable are you with your knowledge of mental performance principles as they apply to the practicing EM physician?
4. How highly do you value the incorporation of mental performance principles into the maintenance of your career as a practicing EM physician? (see Figure 2 for sample survey question and responses).

Results

Survey data from 30 of 41 eligible EM residents demonstrated that 83% of residents felt that mental performance topics were “extremely relevant” to the resident physician. Ninety-three percent rated mental performance training as either “important” or “extremely important” for optimizing residency training. Nearly half (43%) of residents rated the incorporation of mental performance principles as “invaluable” for the maintenance of a career as an EM physician.

Conclusions

The AMPED curriculum provides EM residents with evidence-driven, actionable mental performance training to optimize clinical performance. These skills may decrease acute stress responses in critical clinical scenarios, highlight the importance of teamwork, and build emotional resilience for a career in medicine. Residents in this study highly valued the AMPED mental performance training. Further studies are needed to determine if optimizing mental performance in the ED may mitigate physician burnout and improve patient care.

Limitations

The limited sample size, consecutive enrollment, and lack of randomization limit the generalizability of the study conclusions.

Figure 1. AMPED Curriculum Overview

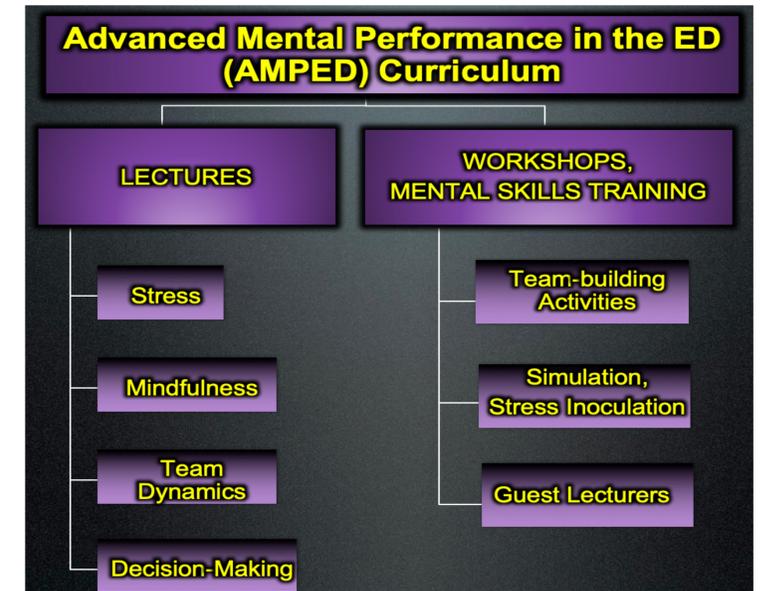


Figure 2. Survey responses to Question 4

