Fatigue Risk Management Strategies to Mitigate Elevated Levels of Fatigue in the Emergency Department

Margaret Sulzbach1, BS; Thomas Britt2, PhD; Zachary Klinefelter3, PhD; Emily Hirsh2, MD; Lauren Fowler1, PhD

1University of South Carolina School of Medicine Greenville, 2Prisma Health, 3Clemson University

Background

- Fatigue can lead to slowed reaction times, impaired memory, and decreased attention span.
- Fatigued drivers cause 20-30% of road accidents and 5-15% of fatal car accidents, and fatigue has been demonstrated to increase reaction times similar to intoxication.1,2
- The consequences of fatigue are evident across various sectors; however, the healthcare setting is severely lacking in fatigue risk management strategies when compared with other workplaces.1
- In order to prevent the detrimental effects of fatigue, a fatigue risk management system (FRMS) should be implemented in the Emergency Department (ED).

Results

Previous Research:

- Readiband data showed some physicians’ Readiscores dropped into a state of severe fatigue during their work shift.
- Qualitative interviews with ED physicians showed trends of fatigue with responses such as:

  "I don’t know how to describe it, it’s almost like when you feel dehydrated. You just feel washed out, and like, man, I’ve been here six and a half hours and I haven’t even had an apple. I haven’t had anything to eat. I haven’t had any water, nothing."

Current Research:

- Meeting with the Department Chair of ED revealed that there is NO fatigue risk management system currently in use aside from managing work shift scheduling.

Methods

Previous research from this lab, including Readbands and qualitative interviews with ED physicians, indicated a need for FRMS in the ED. Potential fatigue mitigation strategies were then researched.

Evidence-Based Recommendations for Fatigue Risk Management in EMS

Use fatigue/keepsleep survey instruments to measure and monitor fatigue.

Work shifts shorter than 24 hours in duration.

Ensure access to caffeine as a fatigue countermeasure.

Nap while on duty if needed to mitigate fatigue.

Educate and train to mitigate fatigue and fatigue-related risks.

References


2. Fatigues’ effects are comparable to alcohol impairment. Fatigue science. https://www.fatiguescience.com/keep-science/technology/ Published February 18, 2021


