

Implementing a Preclinical Elective: Practical Skills in EMS and Disaster Response

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Introduction

Preclinical training during medical school focuses on the science of medicine. While valuable and necessary, this information is not always immediately applicable to patient care. While a few medical students begin their training after a background in emergency medical services (EMS), most students lack such experience. Because first aid training is not a part of the core medical school curriculum, we aimed to design an EMS course in order to allow interested medical students to gain the practical skills to intervene during a medical emergency, while also gaining exposure to emergency preparedness and disaster response.

Methods

The director of the Division of EMS, Kenneth Williams, M.D., was identified as the faculty advisor for the preclinical elective course. We developed a lecture and skills based curriculum for medical students. Guest lecturers in emergency preparedness and disaster response were identified. A finalized syllabus was distributed during an information session.

The course was held once weekly from October 12, 2016 to December 10, 2016. During the initial meeting, an electronic copy of first aid guidelines based on the Maryland EMS protocols was distributed. Copies of sample medical scene run-sheets were made available for practice cases. Skills covered during the course included the evaluation of medical emergencies outside of a hospital setting,

splinting, mass casualty incident triage, and CPR. An initial survey assessing the interest of medical students in an EMS preclinical elective was conducted. In addition, enrolled students were surveyed after each course meeting to rate satisfaction, appropriate pace of material, and overall effectiveness.

Results

A total of 42 students responded to an initial survey expressing interest in taking the EMS preclinical course; 24 students completed a secondary survey about their confidence in responding to an emergency situation. The average response rating regarding the “ability to respond to an emergency” was 1.75/5.00; (1 = “not at all confident” and 5 = “fully confident”). A total of 9 students applied to take the course, and 6 students enrolled. Data collection is ongoing and analysis will be completed once the final surveys are submitted.

Conclusion

Through planning and realizing this preclinical elective, experience was gained in curriculum planning, lecturing, and delegating roles among a team as well as insight into the logistics required to recruit students and conduct a course. Further work includes continuing to refine the course curriculum for future sessions, continue to offer the elective to first-year medical students, and identify students who can take over the management of the course for the fall semester of 2018. Once the data collection is complete, efforts can be made to evaluate course effectiveness and adjust the material accordingly. Future projects may entail working alongside Dr. Williams to establish a clinical elective with the Division of EMS, which is not currently offered at Alpert Medical School.

Image 1. EMS Pre-clinical Course Elective Materials