Sleep in the Emergency Department: How Shifts Affect Sleep Quality and Quantity

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**Background:** Optimal sleep hygiene represents a critical component of a healthy lifestyle. Physicians who advocate for comprehensive health in their patients still find quality sleep elusive. Long calls and rotating shifts leads to sacrificing sleep quality. Unknown is to what detriment of physician wellness.

**Objectives:** This study explores the effect of shift work on quality and quantity of sleep. We analyzed sleep patterns in emergency medicine residents and attending physicians during their assigned time in the emergency department. We hypothesized that participants with sleep onset in the daytime hours would have suboptimal sleep duration and quality.

**Methods:** Twenty-nine participants (twenty-six residents and three attendings) volunteered to participate in this study, wearing a fitness tracker to monitor sleep and activity level for three months. Time of sleep onset was categorized into three interval groups: interval 1 (0600-1400hrs), interval 2 (1400-2200hrs), or interval 3 (2200-0600hrs). Mean length of sleep for each interval group, sleep latency, and proportion of time spent in light and deep sleep, were analyzed.

**Results:** Sleep sessions with onset in interval 1, had mean total sleep duration of 5.26 hours, significantly less than 7.31h for interval 2, and 7.06h for interval 3. There was no significant difference in proportion of light sleep versus deep sleep amongst interval groups. Sleep latency was greatest for sessions with onset in interval 2, at a median of 36.54 minutes, in contrast with interval 1(24.87 m), and interval 3 (22.09).

**Conclusions:** Sleep onset in the morning hours (0600-1400) was correlated with a 23.5% decrease in overall sleep duration. Proportions of light and deep sleep appear to be unaffected by interval time of sleep onset. Participants had a 61% increase in sleep latency from the median when sleep onset occurred during the afternoon/evening hours (1400-2200).

Social Media and Other Sources of Information Used During the Emergency Medicine Residency Application Process

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**Background:** During the residency selection process, applicants gather information from a variety of sources, including medical student colleagues, residents and faculty at their home institutions, flyers, websites, and social media. The world of social media is rapidly changing and little has been published recently on how emergency medicine applicants are using social media to follow residency programs that they are applying to.

**Objectives:** The objective of this study was to describe the impact of social media on the resident application and selection process.

**Methods:** We conducted a survey of the applicants who interviewed at our emergency medicine residency program. We reported the use of online tools, including social media, to research potential residency programs. We used proportions and 95% confidence intervals to report our results.

**Results:** Out of 181 emergency medicine applicants who were sent the survey, 96 students responded, resulting in a 53% response rate. Survey results confirmed that a program’s website is almost universally used as 94% (87-97%) reported accessing the website for information when applying to a program. Furthermore, 74% (64-82%) of students cite faculty advisors as having a substantial influence, as well as other medical students at a rate of 58% (48-68%). Nearly half of applicants or 45% (36-55%) used Student Doctor Network. Only 7% (4-14%) used FREIDA, and only 3% (1-9%) of applicants used the EMRA site. Finally, 21% (14-30%) of applicants follow EM programs on social media. Specifically, of these applicants who use social media, 60% (36-80%) follow programs on Twitter and 40% (13-64%) follow programs on Facebook.

**Conclusions:** Our study finds that many applicants are using Student Doctor Network and engage in social media to learn about residency programs in addition to more traditional sources such as the program website and word-of-mouth from their immediate peers and medical school faculty. Our results suggest that the percentage of applicants using social media to follow programs is still modest, but this number may change as the social media sphere continues to evolve and users adopt new technologies.

Survey of Emergency Medicine Residency Quality and Patient Safety Curricula

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**Background:** Long required by the American Council of Graduate Medical Education (ACGME) Emergency Medicine Program Requirements, the importance of resident training in quality improvement and patient safety (QI/PS) has been highlighted by the ACGME: Milestones and CLER initiatives, and recently proposed revisions to the Common Program Requirements.

**Objectives:** Describe current QI/PS curricula of Emergency Medicine Residency Programs.