

2019 NEHS Annual Meeting Abstract Submission

ABSTRACT TITLE *	Understanding the circumstances behind sharps injuries in orthopedic and plastic surgery residents and the barriers to injury reporting
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Name of who will present abstract at NEHS meeting on December 6, 2019 Please note that the same person cannot present more than one abstract at the meeting. *	Julian D'Achille
Please indicate if the presenter is: *	<ul style="list-style-type: none">Not currently a resident or fellow
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ABSTRACT – should include background information and a description of methods, programs, or practices. *

Background

Sharps injuries are a common occurrence in the medical setting, with nearly 400,000 such injuries in hospitals each year in the United States. It is believed that nearly half of these injuries are not reported. Operating rooms are known to be a particularly high-risk environment. Previous studies of general surgery residents demonstrated nearly all trainees sustained a sharp injury by the completion of training, and residents are more likely to sustain sharps injuries than medical students, attending faculty, and scrub personnel. Residents are also not likely to report sharps injuries, often citing the time required as the reason for nondisclosure. This was a pilot study to 1) ascertain the incidence of sharps injuries in orthopedic and plastic surgery residents; 2) identify situational factors and circumstances behind sharps injuries in this resident population; and 3) to determine any specific institutional barriers to reporting sharps injuries.

Methods

All current orthopedic and plastic surgery residents were recruited in the study. All residents who consented to be a part of the study were administered an anonymous questionnaire inquiring if they experienced a sharps injury during their residency at UMass and questions regarding the incident. A private, in-person interview was then performed for residents who indicated they had sustained a sharp injury to gain additional detail about the incident. Data collected included responses to the questionnaire as well as the in-person interview responses.

Results

Thirty-six of 38 residents (94.7%) responded to the questionnaire; of these, 29 sharps injuries were reported. 23 residents (63.9%) reported at least one incident, with 6 residents reporting 2. The operating room was the most common location in which the injury occurred (n=23, 79.3%) with a suture needle as the most common cause (n=21, 72.4%). Most of the injuries were accidentally self-inflicted (n=23, 79.3%). Residents were likely to report being distracted or not paying attention when the injury occurred. Seventeen of the incidents (58.6%) were reported, most respondents reported directly to Employee Health. Twelve (41.3%) of the incidents were not disclosed. Residents cited multiple reasons for not reporting, including a "low risk" patient for HIV or Hepatitis C infection, too much time required to report, and a burdensome consent process as the top reasons.

Conclusion

The study demonstrated most residents experienced a sharps injury during their training at UMass, with just over half of the incidents reported despite hospital policy. In the in-person interviews, the residents offered suggestions for streamlining the process, including on-line reporting of the incident to Employee Health and changes to the consent process. Given that the primary research tool was a questionnaire, the study inherently has limitations of recall bias and

social desirability bias. As this was a pilot study at a single institution, further refinement of the questionnaire is warranted prior to wider dissemination.
