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Characteristics of Traumatic Injury in Sexual Assault Patients

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educational activities to a virtual format. To our knowledge, little is known about how this format change impacts attendance.

**Objectives:** To examine changes in conference attendance across various methods of conference delivery: in-person, virtual conference, and virtual conference with a video-on requirement. We hypothesized that overall attendance would increase with the change to virtual format.

**Methods:** This is a retrospective, observational study of resident conference attendance from July 2019 to November 2020, abstracted from routinely collected records for all emergency medicine residents (n=30). Groups included residents attending in-person conference, virtual conference, and virtual conference with a camera-on requirement (Table 1). The primary outcome was conference attendance. An a priori subgroup analysis was performed to examine changes in attendance for the in-person format before onset of the pandemic versus during the pandemic. Chi-squared analyses were performed.

**Results:** Overall, there were 7800 hours of conference, with 5936 hours attended (76.1%). Attendance for in-person, virtual, and virtual with camera-on formats were 75.7%, 80.1%, and 69.5%, respectively (Table 2). A 3-way chi-squared analysis showed significant association between conference format and conference attendance ( $\chi^2 = 29.3, p < 0.005$ ), with each 2-way comparison also being significant. There was no difference in in-person attendance before versus during the pandemic (75.1% vs 76.9%,  $\chi^2 = 2.1, p = 0.14$ ).

**Conclusions:** Resident conference attendance significantly increased after transitioning from in-person to virtual format, but then decreased after adding a camera-on requirement. Limitations include crossing over academic years as well as smaller sample size of the virtual with camera-on format.

**Table 1.** Timeline of conference format changes.

Format	Time Periods
In-person	July 1, 2019 - March 4, 2020
Virtual	March 18, 2020 - June 30, 2020
In-person	July 1, 2020 - September 30, 2020
Virtual with camera on	October 1, 2020 - November 18, 2020

**Table 2.** Resident conference attendance among various conference formats.

Format	Attended (hours)	Not Attended	Possible Hours	% Attended
In-person	4271	1369	5640	75.7%
Virtual	1249	311	1560	80.1%
Virtual with camera on	417	183	600	69.5%

## 12 Characteristics of Traumatic Injury in Sexual Assault Patients

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**Learning Objectives:** To characterize types of injuries commonly associated with sexual assault and identify risk factors for these injuries.

**Background:** The ED remains at the forefront for the treatment of sexual assault (SA) patients. Many of these patients require treatment for traumatic injuries sustained during the assault, which can range from mild to severe. The risk factors for traumatic SA remain unclear.

**Methods:** Electronic ED records were reviewed retrospectively from a high volume level 1 Trauma center and nearby community hospital from July 2019 to July 2020 for patients age  $\geq 13$  years with a chief complaint of SA. Descriptive statistics, chi square and logistic regression were used to characterize demographics and identify factors associated with trauma.

**Results:** 157 patients met inclusion criteria. The mean age was 27.9 years old (range 13-79 years) and 92.4% were female. Adult patients (age  $>18$  years) comprised of 78% of assaults compared to adolescents (age 13-18 years) at 22%. The assailants of these sexual assaults were reported as 61.2% acquaintance, 22.9% stranger and 15.9% intimate partner (IP). In 8.9% of cases, the patient reported an attack by multiple assailants. 57 (36.3%) patients exhibited trauma on presentation. 30 (24.8%) cases involved alcohol use ( $P=0.95$ ) and 22 (14%) reported a drug facilitated assault ( $P=0.64$ ) but neither was statistically associated with trauma. Chi square analysis showed an association of trauma with adult age ( $P<0.05$ ) and assault by IP ( $P<0.05$ ). 45 (28.6%) patients had minor injury described as abrasions, lacerations or contusions. Major trauma occurred in 12 (7.6%) patients, which consisted of complex fractures and nonfatal strangulation. Logistic regression determined that assault by IP (OR=2.6, 95% CI 1.1-6.5) and being an adult patient (OR=3.0, 95% CI 1.1 - 7.7) increased the risk of trauma. Assault by IP also increased the risk of nonfatal strangulation (OR=4.0, 95% CI 1.1-15.4).

**Conclusion:** Traumatic injuries from SA were mostly minor. IP violence was found to be a key risk factor for trauma and findings of nonfatal strangulation.

## 13 Clerkship Student Perceived Educational Effectiveness of Virtual Simulation

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**Learning Objectives:** To determine the perceived