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The Impact of COVID-19 on the Medical Student Emergency Department Clinical Experience

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Author

Bridges, Page

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with iterative changes. After IRB approval, the UME survey was distributed to members of CORD during the 2021 Academic Assembly. Using SPSS v26, a descriptive analysis was performed.

Results: Sixty-three individuals responded to the UME survey, with 27 (42.9%) program directors (PDs), 19 (30.2%) assistant/associate PDs, 5 (7.9%) core faculty, 5 (7.9%) clerkship directors, 4 (6.3%) residents/fellows and 3 others (vice chair of education, educational researcher, unknown). Most respondents were white (84.1%) and approximately half identified as women (50.8%). Table 1 provides means and standard deviations for statements displayed from most to least important.

Conclusions: The positive financial impact on medical students was described as the greatest benefit of the pandemic. Virtual technology was varied in its impact: positive for conferences and interviewing but negative as a surrogate for clinical rotations or the ability for students to evaluate residency program culture. The top challenge facing UME was the removal of students from clinical rotations. This may impact residency programs, requiring them to remediate those skills. A limitation of this geographically broad cohort was the number of respondents.

Table 1. Undergraduate medical education benefits and challenges.

Item	Mean	SD
<i>UME Benefits – Rank 1 to 6 with 1 being most important.</i>		
Decreased financial burden of away rotations/interviews	2.53	1.76
Increased utilization of asynchronous learning	3.08	1.49
Use of videoconferencing programs (Zoom, etc.)	3.29	1.61
Re-evaluation of current education modalities for students	3.63	1.68
Ability to attend virtual education sessions from a variety of departments/programs	3.69	1.58
Time for students to participate in scholarly activity	4.77	1.29
<i>UME Challenges – Rank 1 to 7 with 1 being most important.</i>		
Students pulled from clinical rotations	1.40	0.88
How students get the “fit” of the program over the virtual platform	3.32	1.61
Use of virtual rotations while students were pulled from clinical experiences	4.18	1.47
Restrictions on simulation activities	4.45	1.73
Inability to host in-person lecture	4.58	1.65
Virtual interviews	4.70	2.00
Students having to remediate required clinical rotations prior to 4th year electives	5.30	1.77

SD = Standard Deviation

UME = Undergraduate Medical Education

30 Prez Drills: An Online Interactive Workshop to Develop Presentation Skills in Preclinical Medical Students

Alexis del Vecchio, Anthony Seto, Paul Bryan, Logan Haynes, Nicole Ertl

Learning Objective: Students at our university identified low confidence in presenting oral cases and a desire for more practice. We created a workshop, “Prez Drillz”, to address this. We will cover our initiative, results to date, and ways that this can be implemented at other medical institutions.

Background: Presenting clinical cases orally is a core skill for medical students, a task some find intimidating. Oral case presentations may influence preceptors’ impression of students, as it highlights learners’ cognitive and non-cognitive attributes.

Objectives: Students at our university identified low confidence in presenting oral cases and a desire for more practice. We created a workshop, “Prez Drillz”, to address this.

Methods: Before the workshop, students viewed a podcast on oral case presentation structure. 154 second-year students participated in the 2.5-hour workshop, hosted via Zoom videoconferencing, with 1 physician preceptor for 4-5 medical students. During the workshop, students first listened to a 5-minute case audio, outlining patient history and examination findings. Students delivered an oral case presentation, based on information extracted. Self-reflection and feedback from peers and preceptor followed. Students then practiced delivering a second oral case presentation by implementing the feedback received.

Results: Students completed a retrospective survey on their agreement (1=strongly disagree; 5=strongly agree) with self-efficacy statements regarding presentation skills pre- vs post-workshop (effective frame/context, clear history/physical exam, convincing top differential diagnoses, comprehensive management plan, appropriate confidence, clear/effective communication, organized/structured approach). All ratings of self-efficacy (N=23) increased with statistical significance (p<0.001) and large effect size; the average self-efficacy rating was 2.50/5 pre-workshop versus 4.32/5 post-workshop. Average workshop rating (N=55) was 4.73/5.

Conclusions: This workshop improved students’ self-efficacy in oral case presentation skills. Peer-teaching, repetition, and feedback opportunity aided their success. Medical educators can adapt this model to help learners improve and elevate their oral case presentations.

31 The Impact of COVID-19 on the Medical Student Emergency Department Clinical Experience

Page Bridges, Samantha Shelhoss, Paige Neroda, Elena Roberts, Lindsay Grasso, Smith Heavner, Lauren McCafferty

Learning Objective: Describe the impact of COVID-19 related restrictions in the clinical learning environment on the patients and chief complaints evaluated by students.

Background: In March 2020, medical students across the nation were removed from the clinical learning environment in response to novel coronavirus. Upon returning, students found new precautions and restrictions around patient care to avoid exposure and curb PPE shortages. These restrictions often impacted which patients students could see, potentially changing their experience in comparison to students in typical years.

Objectives: With the restrictions placed on medical students on their return to the clinical learning environment, we anticipate that their experience would differ from students in the prior year. Specifically, we hypothesize that students would see fewer patients with respiratory or infectious symptoms as their presenting complaint.

Methods: Through a query of the electronic medical record, we obtained de-identified information for all patients seen in the Emergency Department at our large academic medical center for June 1 – October 31 in 2019 and 2020, including age, chief complaint, and if the patient was seen by a medical student. Investigators categorized chief complaints into one of twelve categories and calculated the total number of student shifts during the study time period using the published student schedule. We calculated the average number of patients seen by students in each category per shift for 2019 and 2020.

Results: In 2020, students saw on average fewer patients with respiratory, constitutional, and cardiac presenting complaints per shift. Students saw slightly fewer patients per shift overall in 2020 in comparison to 2019.

Conclusions: Restrictions placed on medical students in the Emergency Department during the COVID-19 pandemic have had a significant impact the student clinical experience during their clerkships. Although the intent of these restrictions was to protect learners from the risks posed by caring for COVID patients, these restrictions had unintended consequences on which patients students evaluated.

Table 1.

Chief Complaint Category	2019 Patients per student shift	2020 Patients per student shift
Cardiovascular	0.51	0.40
Constitutional	0.57	0.35
Endocrine	0.05	0.05
Gastrointestinal	0.78	0.76
Genitourinary	0.17	0.18
Integumentary	0.18	0.18
Musculoskeletal	0.56	0.56
Neurologic	0.38	0.34
Psychiatric	0.13	0.14
Other	0.43	0.41
Respiratory	0.45	0.17
Trauma	0.66	0.67
Total	4.85	4.2

32 Identifying Gaps in Ultrasound Education and Potential for a Digital Curriculum

Michael Muradian, Mayank Gupta, Steven Johnson, Amit Bahl

Learning Objective: Attendees will learn about how development of a digital ultrasound curriculum can be used to address knowledge gaps in resident education and is associated with improved confidence with performing and interpreting ultrasound exams.

Background: Ultrasound is a key competency for EM residents and has numerous applications. It is not clear if residents gain sufficient experience with less frequently used ultrasound exam types through traditional teaching methods. A digital curriculum may provide additional learning opportunities and help to address these knowledge gaps.

Objectives: The primary goal was to identify current gaps in resident ultrasound education by assessing confidence in performing and interpreting various U/S studies. A secondary goal was to determine if a digital ultrasound curriculum was feasible.

Methods: This prospective observational study was performed at a 3-year EM residency program located at a level 1 trauma center in a large metropolitan area. A pre-implementation survey evaluated resident utilization and confidence with various U/S exams using multiple choice and Likert scale questions. After implementation of a digital ultrasound curriculum, which included monthly cases and self-paced modules, a post-implementation survey was conducted.

Results: There were 12 and 18 respondents in the pre and post implementation surveys respectively. In both surveys, FAST and cardiac exams had the highest confidence and utilization scores. Ocular, pelvic, DVT, and renal U/S had low pre-implementation confidence and utilization scores that increased significantly on post implementation surveys (Figures 1 and 2). Initially, PGY3's used U/S most frequently but post-implementation PGY2's had the highest overall usage. Overall, the digital curriculum post-implementation survey showed an 88% increase in interpretation confidence score and a 28% increase in utilization.

Conclusions: Confidence with performing and interpreting various ultrasound exams was low for infrequently used exam types and increased significantly following the implementation of a digital curriculum. These are feasible interventions and could improve knowledge of less commonly used exams.