UC Irvine

Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health

Title

Interviewing the Neurodivergent Candidate

Permalink

https://escholarship.org/uc/item/2b15r0gv

Journal

Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health, 24(3.1)

ISSN

1936-900X

Authors

Gonzalez, Erin Datta, Suchismita Stansky, Danielle et al.

Publication Date

2023

DOI

10.5811/westjem.61019

Copyright Information

Copyright 2023 by the author(s). This work is made available under the terms of a Creative Commons Attribution License, available at https://creativecommons.org/licenses/by/4.0/

address this need, the Departments of EM and Ophthalmology at our institution have designed an Ophthalmology Education Day (OED) designed to improve performance of ophthalmologic examination and procedural skills.

Educational Objectives: (1) By the end of the OED learners will demonstrate a systematic approach to the emergency ophthalmologic examination, developing a differential diagnosis of emergent causes of eye pain and vision loss. (2) Our OED will increase resident comfort and knowledge of the major components of the emergency ophthalmologic examination. (3) By the end of the session, our learners will demonstrate sustained proficiency in performing potentially vision-saving procedures within the scope of EM practice. (4) Learners will demonstrate ongoing knowledge retention after participation in the OED.

Curricular Design: Our OED will include systematic eye examination instruction, high-fidelity procedural stations, and three simulation cases. A single-center prospective pre- and post-interventional study involving PGY-1-4 EM residents evaluating change in checklist-based performance on a simulated case of orbital compartment syndrome requiring lateral canthotomy will be performed. Our checklist is being validated via modified Delphi methodology. Resident performance on the case will be assessed three months before the OED, after procedural training on OED, and three months after the OED.

Impact: There is an urgent need for improved ophthalmology education during EM residency, particularly for managing vision-threatening diagnoses. We hypothesize that resident performance of management of eye-saving interventions will statistically significantly improve after OED participation.

21 Improving Patient Care at the Bedside for Disadvantaged Populations through Medical Student Participation in a Shelter Outreach Clinic

Laura Ortiz, Brian Felice, Stephen Fox, Michael Marchiori, Divyani Patel, Jason Adam Wasserman

Background: Providing care at the bedside for disadvantaged patients can be difficult due to few interactions with these patients and unconscious biases that may exist in providers and lead to poorer patient encounters and care.

Objectives: A pilot study was performed to see if participation in a Street Medicine Program during medical school enhances a student's comfort at the bedside for both the general and a disadvantaged population.

Methods: This is a retrospective study. A survey was sent out to medical students in their clinical years who had participated in a shelter outreach encounter during their first two years of medical school. Students participate in a free clinic where they perform history and physicals, staff with the attending physician and develop a plan for treatment of the patient. The survey had 36 questions, asking students

their comfort levels in specific activities. These questions were asked for before and after participation in an outreach encounter. A modified Likert scale was used, with a range between 0-100, with 0 extremely uncomfortable and 100 extremely comfortable. Responses were anonymous and a paired t-test was used to analyze the mean change in comfort level of participants after their participation in the clinic. A p value of <0.05 was used as cutoff for statistical significance.

Results: 36 students were emailed the survey with 11 students responding (31% response rate). Statistically significant increases in comfort levels were found in 11 of the 14 categories, notably with comfort levels in all areas (history, physicals, assessment and plan, presenting to a physician) regarding treating disadvantaged populations.

Conclusions: Medical student comfort with disadvantaged populations increases with the opportunity to treat these patients. Limitations to this study include low response rate, and recall bias with before and after an intervention being asked on the same survey.

22 Interviewing the Neurodivergent Candidate

Erin K. Gonzalez, Suchismita Datta, Danielle Stansky, Christopher Caspers, Meredith Ankerman

Background: Understanding the complexity of autobiographical memories and developing interview techniques for autistic adults are areas of active research.

Educational Objectives: Pilot a training session for EM faculty for interviewing neurodivergent [ND] residency applicants to develop competent, equity-minded residency interviewers.

Curricular Design: A 1-hour, virtual session was scheduled within an existing faculty development time slot to facilitate faculty availability. Educational leadership supported this initiative as an informal needs assessment suggested interest and a knowledge gap. The ADDIE instructional design model was used. Self-reported effectiveness and enjoyment was measured via anonymous survey based on the validated Intrinsic Motivation Inventory tool. Direct instruction was used to present current understanding and terminology of autism and neurodiversity, including executive function, autobiographical memory, and theory of mind. Then, prerecorded videos were shown with actors representing a neurotypical and a ND candidate who received the same interview questions. Guided practice was used to demonstrate how to elicit relevant responses from a ND interviewee. Concluding the lecture was a review of recent studies showing positive effects of semantic prompting, visual-verbal prompting, and other question adaptations in employment interviews. The session ended with a group reflection around topics presented. Since participants were advanced adult learners but novices in this field, the

Table 1. Post session anonymous survey questions used for feedback from learners.

Regarding your perceived competence with this session:
I think I am pretty good at this activity,
I think I did pretty well at this activity, compared to other students.
After working at this activity for a while, I fielt pretty competent.
I am satisfied with my performance at this task.
I was pretty skilled at this activity.
This was an activity that I could not do very well.

While I was doing this activity, I was thinki

Would you like to learn more about this topic? Select one answer.

- Absolutely
- 2. Maybe
- 3. Not really
- 4. Definitely not

Table 2. Survey results.

	Question: interest/enjoyaesal	Minimum	Miccinan	Micsen	Stal Desimbon	Variance	Ħ
1	l enjoyed doing this activity very much	140	7.50	ស	D.81	B63	10
2	This activity was fun to de.	140	7.50	628	D <i>87</i>	B76	10
3	I throught this was a busing activity.	1.00	4.50	136	D.90	B.R.	10
•	This activity did not hold my attention at all.	1.00	7.00	150	192	168	10
3	I would describe this making as way interesting	4.50	7.50	670	D.90	D.M.	10
6	I thought this activity was quite expopulate.	4.00	7.00	640	D92	D.54	10
7	While I was ching this, activity, I was thinking about how much I enjoyed it.	4.50	7.50	6.00	1.18	1.40	12
	Question: perceived competence	Minimum	Minorana Min	Micsen	Shi Desirition	Verience:	-
1	I think I am pretty good at this activity.	4.00	7.00	3.20	1.17	1.36	10
2	I think I did pretty well at this activity, compared to other students.	4.50	7.50	3.00	1.18	1.00	10
2	After working at this activity for a white, I felt pretty competent.	4.00	7.50	3.40	1.02	1.04	10
•	I am satisfied with my performance at this test.	A-500	7.00	330	1.02	1.00	10
3	I was profity stalled at this autimity.	4.50	7.50	3.30	1.22	1.48	10
6	This was on activity that I could not no very well.	1.00	7.50	3.90	2.12	4.00	10
	Question: with:	Minimum	Minum	Micen	Stal Desiration	Vortex:	R
1	I before this activity could be of some wheels rue.	4.00	7.50	640	1.02	1.04	10
2	I would be willing to do this again because it has some wine to me.	4.50	7.00	640	1.02	1.04	10
3	I before doing this activity could be benificial to me.	4.00	7.50	640	1.02	1.04	10
•	Hink this is an important mainity.	4.00	7:50	6.40	1.02	1.04	10

session was based in a mix of both cognitive and social constructivist learning theories.

Impact/Effectiveness: Mean rating of the session was 6.4 out of 7 (95%CI 4.4-8.4) for value, and 6.7 out of 7 (95%CI 4.94-8.46) for participant interest. All respondents reported that they wanted more training. Education in

neurodiversity is an effective way to broaden awareness and promote diversity and inclusion in graduate medical education programs.

23 Learning Mass Casualty Triage via Role Play Simulation

Martin Morales-Cruz, Ayanna Walker, Drake Dixon, Latha Ganti, Shayne Gue

Background: The purpose of this educational intervention was to introduce trainees to the core competencies of disaster preparedness/ resource allocation/mass casualty incident (MCI) command, and event medicine. This innovative learning activity involving trainees from different programs teaches effective techniques of how to perform START (Simple Triage and Rapid Transport) in a mass casualty event.

Educational Objectives: 1. Differentiate between day-to-day triage and triage during MCI 2. Apply the components of START.

Curricular Design: The scenario is a Music Festival. A group of residents are granted backstage access to tour the concert grounds and medical tent. During the facility tour, the operations director (proctor #2) radios the tour guide (proctor #1) to let them know of an emergency crowd stampede due to unapproved pyrotechnics causing a fire; the medical tent is all of a sudden being flooded with patients. "Patients" are trainees who receive an index card labeled with vital signs and mental status and transported one at a time to the tent. Residents run over to the tent, perform triage then select two of the most critical patients for air transport. The station leader documents the accuracy of each team. Winners are selected based on time of completion and accuracy of correctly triaging patients. For every incorrect triage a 30 second penalty is added. Incorrectly triaged patient cards are debriefed in detail.

Impact/Effectiveness: This activity engages learners both physically and mentally, necessitating everyone to be active. Impact was measured by post-activity survey, accessed via QR at the station. 93% reported feeling better prepared to manage a real-life MCI. 98% reported that START triage better motivated them to learn. 96% reported this activity challenged them more than other learning activities. Verbal feedback included appreciation for the innovative activity design and being able to get some exercise.

Manual Uterine Aspiration (MUA) Simulation for Emergency Medicine (EM) Residents

Katherine Wegman, Caroline Gorka, Judith Linden, Shannon Bell, Stephanie Stapleton, Virginia Tancioco, Laura Walsh

Background: Early pregnancy loss (EPL) is a common