Lehigh Valley Health Network

LVHN Scholarly Works

Department of Emergency Medicine

Teaching Wilderness Medicine Virtually During COVID-19

Nicole Elliott DO

Derek J. Fikse DO

Eric Schneider DO

Kevin R. Roth DO, FACOEP

Bryan G. Kane MD

See next page for additional authors

Follow this and additional works at: https://scholarlyworks.lvhn.org/emergency-medicine



Part of the Education Commons, and the Medicine and Health Sciences Commons

This Poster is brought to you for free and open access by LVHN Scholarly Works. It has been accepted for inclusion in LVHN Scholarly Works by an authorized administrator. For more information, please contact LibraryServices@lvhn.org.

Teaching Wilderness Medicine Virtually During COVID-19

Nicole Elliott, DO,¹ Derek Fikse, DO,¹ Eric Schneider, DO,¹ Kevin Roth, DO,¹ Bryan Kane, MD,¹ Hillary Irons, MD, PhD, FACEP,² Michael Nguyen, MD¹

¹Lehigh Valley Health Network/University of South Florida Morsani College of Medicine, Lehigh Valley Campus, Allentown, PA, ²University of Massachusetts Medical School, Worcester, MA

The recommended best practice is to teach Wilderness Medicine (WM) outdoors, with interactive elements and teamwork exercises. With COVID-19 pandemic mandated social distancing, we were forced to host didactics remotely. In response, we developed WM content to adapt to a virtual classroom.

This IRB reviewed project, conducted at a PGY 1-4 EM residency, measured learner satisfaction and engagement via standard continuous medical education (CME) program evaluation (Table 1). Each activity had a separate voluntary and anonymous evaluation. Likert responses were analyzed descriptively and comments qualitatively. Previous in-person sessions were adapted. To prepare, a survival package containing paracord, a stormproof match kit with waterproof case, and a foil mylar rescue blanket was distributed to each resident. A PDF of the triage board game was emailed. Teams were created based on PGY year. Faculty prepared one week prior with a dress rehearsal.

Table 1 demonstrates the responses, which decreased over the 6 sessions. Qualitatively the real-life demonstration of the Session 1 was appreciated: "It was engaging on a video level because it was actually from a location that kept me engaged – not just someone flicking through slides." The remote location resulted in technical difficulties. In the 2nd, the competition was the most common positive theme. One resident noted that "speed typing" is necessary to win. Feedback on the 3rd focused on how the residents could use the information and supply kit personally: "The ideas presented were easy to implement but also crucial to survival." "Having to think what you would do or say in a real time situation" was a positive theme in the 4th while more time to debrief and discuss the ideal management was an opportunity to improve. In the 5th, "It felt like a real-life mass causality. Dr. X did good putting the pressure on us. It was good to think through how to prioritize the patients. It was good how not all the patients came at once". The ability to have completed the session in smaller groups was requested. Feedback focused on how to "buzz in" in order to compete in the 6th.

The resident and faculty feedback skewed positive, suggesting that virtual WM education is feasible. While a single site study, the comments focused on the competitive elements.

TABLE 1: LEARNER FEEDBACK VIA CME QUESTIONS

Session Title	Session Time, Number of Evals	The objective(s) for this activity were met	The pacing of the activity was appropriate.	The speaker(s) kept me engaged.	I learned new knowledge from this activity.	I will be able to apply what I have learned to my job.	I would recommend this activity to others.	This activity will improve my job performance and productivity.
1. Special Operations Search and Rescue	0900-0945 26 Evals	17 SA 8 A 1 N/A	17 SA 9 A	18 SA 6 A 2 U	19 SA 6 A 1 U	13 SA 8 A 1 U 2 D 2 N/A	19 SA 5 A 2 U	12 SA 7 A 2 U 2 D 3 N/A
2. Wilderness Tox Visual Diagnosis	0950-1035 18 Evals	14 SA 4 A	12 SA 6 A	14 SA 4 A	16 SA 1 A 1 U	13 SA 4 A 1 U	14 SA 4 A	13 SA 3 A 2 U
3. Survival Skills	1040-1125 14 Evals	8 SA 6 A	9 SA 4 A 1 D	9 SA 4 A 1 U	9 SA 5 A	7 SA 6 A 1 N/A	8 SA 6 A	7 SA 5 A 1 U 1 N/A
4. Sim Wars [©] Medical Command	1140-1225 7 Evals	4 SA 3 A	4 SA 3 A	5 SA 2 A	5 SA 2 A	4 SA 3 A	5 SA 1 A 1 U	4 SA 3 A
5. Triage Board Game	1230–1315 11 Evals	7 SA 4 A	7 SA 3 A 1 U	7 SA 1 A 1 U 2 D	6 SA 4 A 1 U	7 SA 4 A	7 SA 2 A 2 U	7 SA 3 A 1 U
6. Wilderness Medicine Jeopardy	1320–1400 5 Evals	2 SA 3 A	2 SA 3 A	3 SA 2 A	2 SA 3 A	2 SA 3 A	2 SA 3 A	2 SA 3 A

Possible Responses = Strongly Agree (SA), Agree (A), Undecided (U), Disagree (D), Strongly Disagree (SD), Does Not Apply (N/A)



