

Situational awareness among prehospital providers during an online high-fidelity simulation – A Novel Study

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Introduction

- It has been suggested that prehospital providers need to be situationally aware in order to reduce human error. By reducing human error, patient outcomes may be improved. Research during the COVID19 pandemic has been difficult and while many projects were put on hold, the authors created a novel manner in which to complete this study and measure SA – through online simulation.

Methods

- This was a mixed-methods explanatory sequential study where prehospital providers participated in an online simulation. The situational awareness global assessment technique (SAGAT) was utilized during periodic freezes in the simulation where the participants would answer questions related to the environments of the patient and the scene. Questions were focused on perception, interpretation, and prediction. Following the simulation, participants provided feedback during interviews.

Results

- The providers did not possess high levels of SA. Overall SA was 45% (p-value, .162). Participants performed best at perception with a steady decline to interpretation and then prediction. Those with higher levels of education performed better, although this was not statistically significant, (p-value, .09). Those with more experience initially had higher SA but then tended to decrease with more experience (p-value, .24).

Prehospital providers are not situationally aware during online simulation. They focused on the surroundings at first, but did not focus as much on the patient. The SAGAT can be utilized in an online format and may possibly enhance overall performance. Further research is needed to determine if higher levels of education and experience play a role in prehospital SA.

