The effect of simulation wars on emergency medicine residents’ reasoning skills

Background: Simulation Wars, a clinical reasoning simulation, has rarely been incorporated into resident curriculum, but when included has been shown to improve clinical reasoning skills.

Objective: To study the effect of Simulation Wars on in-training examination (ITE) scores and global rating scale (GRS) scores in emergency medicine (EM) residents.

Methods: The quasi-experimental design was used in this retrospective study. The main comparison was with historical controls and the intervention group, who participated in the Simulation Wars.

Results: There was a total of 127 residents in this study (70 intervention, 57 control). There was no significant difference found in GRS scores except for communication and professionalism (p<.001). There was a significant (p=.02) improvement in ITE scores in the category of thoracic disorders in first year residents who participated in that category; a significant improvement in the abdominal ITE scores for second year residents who participated in that category (p=.008); and a significant (p=.01) improvement in the ITE scores in trauma for third year residents who participated in that category. Participation in Simulation Wars showed a significant improvement from first to third year and from first year to second year of residency for OB/Gyn and trauma.

Conclusion: Simulation Wars did not improve overall GRS scores nor ITE scores when compared to controls. Simulation wars in such subcategories of abdominal, thoracic, OB/Gyn and trauma improved ITE scores in those subcategories. Simulation Wars should be considered for EM residents.

Biography

Donna Mendez is a Board Certified Pediatrician and Pediatric Emergency Medicine Physician. She completed her Pediatric Residency at University of Texas Health Science Center (UTHSC) in San Antonio, and a Fellowship in Pediatric Emergency Medicine at University of Texas Southwestern in Dallas. She is currently an attending at McGovern Medical School in Houston. She is the Director of the Pediatric Emergency Fellowship established in 2014. She has received her Doctorate in Professional Leadership with an Emphasis in Health Science Education from The University of Houston in 2016. She has published more than 20 papers in journals and online resources.

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