

Clinical and Medical Case Reports

&

10th Orthopedics & Rheumatology Annual Meeting & Expo

August 31-September 01, 2018 | Toronto, Canada



Jennifer L Doherty-Restrepo

Florida International University, USA

Does simulation-based training increase athletic training student's clinical confidence and competence of performing a cardiovascular screening

Context: The need for increased screening to detect cardiac diseases in preparticipation physical examinations is a focus in athletic training.

Objective: To examine if a simulation-based training can increase athletic training students' self-reported confidence and clinical competence in conducting a cardiovascular screening. Design: Pretest-posttest design. Participants: 25 first-year athletic training students.

Intervention(s): Standardized cardiovascular curriculum. Main Outcome Measure(s): Learner self-reported confidence scale, multiple-choice knowledge exam, and objective structured clinical examination (OSCE) of cardiovascular assessment skills and auditory recognition of heart murmurs.

Results: Self-reported confidence increased significantly from 4.4±2.1 to 9.2±3.0 post-intervention ($F = 78.7, p < 0.001$) with a moderately high effect size ($h2=0.789$). Knowledge exam scores increased significantly from 11.0±2.5 to 13.6±4.0 post-intervention ($F= 5.3, p= 0.031$) with a low effect size ($h2=0.191$). The history-taking assessment of the OSCE increased significantly from 2.6±1.6 to 5.7±1.7 post-intervention ($F= 70.1, p< 0.001$) with a moderately high effect size ($h2=0.751$). The clinical skills assessment of the OSCE increased significantly from 4.1±2.8 to 15.6±1.6 post-intervention ($F= 415.4, p< 0.001$) with a high effect size ($h2=0.952$). Conclusions: Simulation-based training is an effective tool for increasing students' self-reported confidence and competence in conducting a cardiovascular screening.

Biography

Jennifer Doherty-Restrepo is a Clinical Associate Professor and Chair of the Department of Athletic Training in the Nicole Wertheim College of Nursing and Health Sciences at Florida International University. Her areas of expertise include andragogy, simulation-based instruction, and professional as well as continuing education in athletic training. Jennifer serves the Athletic Training Profession as a manuscript reviewer for the Journal of Athletic Training and the Athletic Training Education Journal. She is an Associate Editor for the Athletic Training Education Journal. Jennifer serves the Commission on Accreditation of Athletic Training Education as a site visitor. Additionally, she is the Chair of the University and College Athletic Training Student Committee of the Athletic Trainers' Association of Florida. In recognition of her service and contributions to athletic training education, Jennifer was the recipient of the 2015 Athletic Trainers' Association of Florida University and College Athletic Trainer of the Year award.

dohertyj@fiu.edu