Simulation-Based Learning in the Exercise Science Curriculum: Peer Role Play vs Professional Simulated Patient

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Abstract : Aim: The aim of this study was to evaluate if there was an impact on student learning when peer role play was substituted for a professional actor in the role of simulated patient in a simulation-based scenario. Method: Third-year exercise science students enrolled in a field project course in 2015 (n=24), and 2016 (n=20) participated in a simulation-based case scenario designed to develop their client-centred exercise prescription skills. During the simulation, students were provided with feedback from the simulated patients. In 2015, three professional actors played the part of the simulated patient, and in 2016 one of the simulated patients was a student from another exercise science cohort (peer role play). The student learning experience, consistency in case fidelity and feedback provided by the simulated patients was evaluated using a 5-point Likert scale survey and collecting phenomenological data. Results: Improvements to student pre and post confidence remained constant between the 2015 and 2016 cohorts (1.04 and 0.85). The perceived usefulness and enjoyability also remained high across the two cohorts (4.96 and 4.71). The feedback provided by all three simulated patients in 2016 was seen to strongly support student learning experience (4.82), and was of a consistent level (4.47). Significance of the findings to allied health: Simulation-based education is rapidly expanding in the curricula across the allied health professions. The simulated patient methodology continues to receive support as a pedagogy to develop a range of clinical skills including communication, engagement and client-centeredness. Upskilling students to peer role play can be a reasonable alternative to engaging paid actors.

Keywords : exercise science, simulation-based learning, simulated patient, peer role play