Purpose:
Learners are often assigned to the roles of participant and observer in simulation. A participant makes decisions and provides care for a patient during simulation whereas an observer typically watches the scenario unfold from an audio-visual room (O'Regan, Molloy, Watterson, & Nestel, 2016). Confusion continues regarding the value of the observer in simulation and whether they engage in the active and experiential learning environment that underpins simulation (Bong et al., 2017); however, faculty also recognize that multiple learners in the role of the nurse just to ensure everyone is a participant does not prepare students for the realities of clinical practice. Despite studies demonstrating no differences in knowledge between participant and observer, it is still unknown how observers learn in simulation and how they apply that learning to a contextually similar situation; a critical aspect of debriefing (Dreifuerst, 2015; Forneris & Fey, 2016). The purpose of this study was to explore the relationship between nursing student’s roles in simulation and cognitive knowledge demonstration, retention, and application about two contextually similar cases of respiratory distress. The theoretical framework supporting this study is based on the concept of vicarious experiential learning (Hoover & Giambatista, 2009) which is an educational methodology that merges Kolb’s (2015) Experiential Learning Theory and Bandura’s (1971) Social Learning Theory.

Methods: An experimental, pretest-multiple posttest, repeated measures study was conducted with a convenience sample of 119 baccalaureate prelicensure nursing students from two sites from a large multi-campus Southwestern university. Two knowledge instruments were administered throughout different stages of the simulation and four weeks later. Both instruments were piloted and examined for content validity, criterion-related validity, internal consistency, and test-retest reliability. Associations between role in simulation and scores on the knowledge instruments were examined using t-tests and mixed repeated measures-analysis of variance.

Results: Of the 59 active participants and 60 observers, there were no significant differences in knowledge demonstrated or retained after simulation, after debriefing, or four weeks later. Additionally, there were no significant differences in knowledge demonstrated when applied to a contextually similar case after debriefing or four weeks later between participants and observers. Simulation and debriefing positively and significantly impacted scores for students in both the participant and observer roles; however, the four-week time period resulted in significant knowledge decay for students in both roles.

Conclusion: These findings have numerous implications for nurse educators. Students in the observer role experience similar gains and decays in knowledge in comparison to those in participant roles throughout a simulation and debriefing and over time. Educators should continue to value placing learners in observer roles. The significant decay in knowledge indicated that simulation sequencing (Hansen & Bratt, 2017; Woda,
Hansen, Paquette, & Topp, 2017) for deliberate thinking practice is needed throughout the curriculum to continually expose students to similar and different contextual situations of previous simulations. This challenges conventional pedagogical approaches where the assumption that once content is covered, it is learned (Ironside, 2004).

Title:
Observers Learn the Same as Participants Throughout Simulation, Debriefing, and Over Time: The Evidence

Keywords:
Debriefing, Simulation and Student Roles

Abstract Summary:
This presentation will explore the results of a multi-campus, experimental, repeated-measures study comparing how participants and observers construct knowledge in simulation and debriefing, how they apply knowledge to similar and different situations after debriefing, and how knowledge is retained over time.

References:

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