A4.1: Comparison of Simulation-Based Performance with Metrics of Critical Thinking Skills in Nursing Students

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Abstract:
Introduction: Paper and pencil assessments are commonly used to assess critical thinking skills but may not reflect simulated or actual clinical performance. The purpose of this study was to examine the relationship between metrics of critical thinking skills and performance in simulated clinical scenarios.
**Method(s):** In 2007, thirty-six student nurses participated in measurement of critical thinking skills and simulation-based performance using videotaped vignettes (VTV), high-fidelity human simulation (HFHS) and two standardized tests: the California Critical Thinking Disposition Inventory (CCTDI) and California Critical Thinking Skills Test (CCTST). Simulation-based performance was rated as “meeting” or “not meeting” overall expectations. Test scores were categorized as strong, average, or weak.

**Results:** Most (75.0%) students did not meet overall performance expectations using VTV or HFHS; most difficulty related to recognizing the problem and reporting findings to the physician. There was no difference between overall performance based on use of VTV or HFHS (p=0.2771). More students met expectations for the performance subcategory initiating nursing interventions (p=0.0002) using HFHS. The relationship between VTV performance and CCTDI or CCTST scores was not significant except for problem recognition and overall CCTST scores (Cramer’s V = 0.444, p = 0.029). There was a statistically significant relationship between overall HFHS performance and overall CCTDI scores (Cramer’s V = .413, p = 0.047).

**Discussion & Conclusions:** Student nurses’ performance reflected difficulty meeting expectations in simulated clinical scenarios. HFHS performance appeared to best approximate scores on standardized metrics of critical thinking. Further research is needed to determine if simulation-based performance correlates with critical thinking skills in the clinical setting.

**Abstract History:**
This abstract has not been presented or accepted for presentation in whole or in part at the SNRS or other scientific meeting.

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