

Aims

The aims of this mixed-methods study were to:

- 1) Determine if simulations shown in the classroom increase participant cognitive knowledge
- 2) Explore student perceptions of in-class simulation observations

Introduction

- The classroom-clinical gap continues to be a challenge for nursing students and new nurses (Carson & Harder, 2016).
- New and innovative ways to educate today's pre-licensure students are necessary so they are better prepared to transition into practice (Benner et al., 2010).
- High-fidelity simulation-based experiences (HFSBE) have become widely integrated into nursing programs over the past several decades as an active learning strategy that engages students and develops essential "real world" nursing competencies (Alexander et al., 2015; Cantrell et al., 2017)
- Few reports have described simulation as an active learning strategy in the classroom setting to bridge the classroom-clinical gap (Waldner & Olson, 2007).

Methods

- The intervention was an in-class, inter-professional simulation program in a 16-week pre-licensure, undergraduate, third year pathophysiology course that included:
 - 1) Observation of a pre-recorded, 20-minute inter-professional simulation in the classroom at Week 10, Week 12, and Week 16
 - 2) Participation in large and small group debriefing sessions, using Debriefing with Good Judgment, immediately following observation of each of the three inter-professional simulation recordings.
- The three sims consisted of two nursing students and one medical student caring for a patient with rhabdomyolysis, chronic obstructive pulmonary disorder, and chronic kidney disease as those conditions were recently covered in the didactic portion of the class.

Results

- Students' scores (n = 125) on 13 exam questions regarding the topics of rhabdomyolysis, chronic kidney disease, and chronic obstructive pulmonary disease were compared to the previous year's (2018) student cohort (n = 122) who received the course content via lecture-format only.

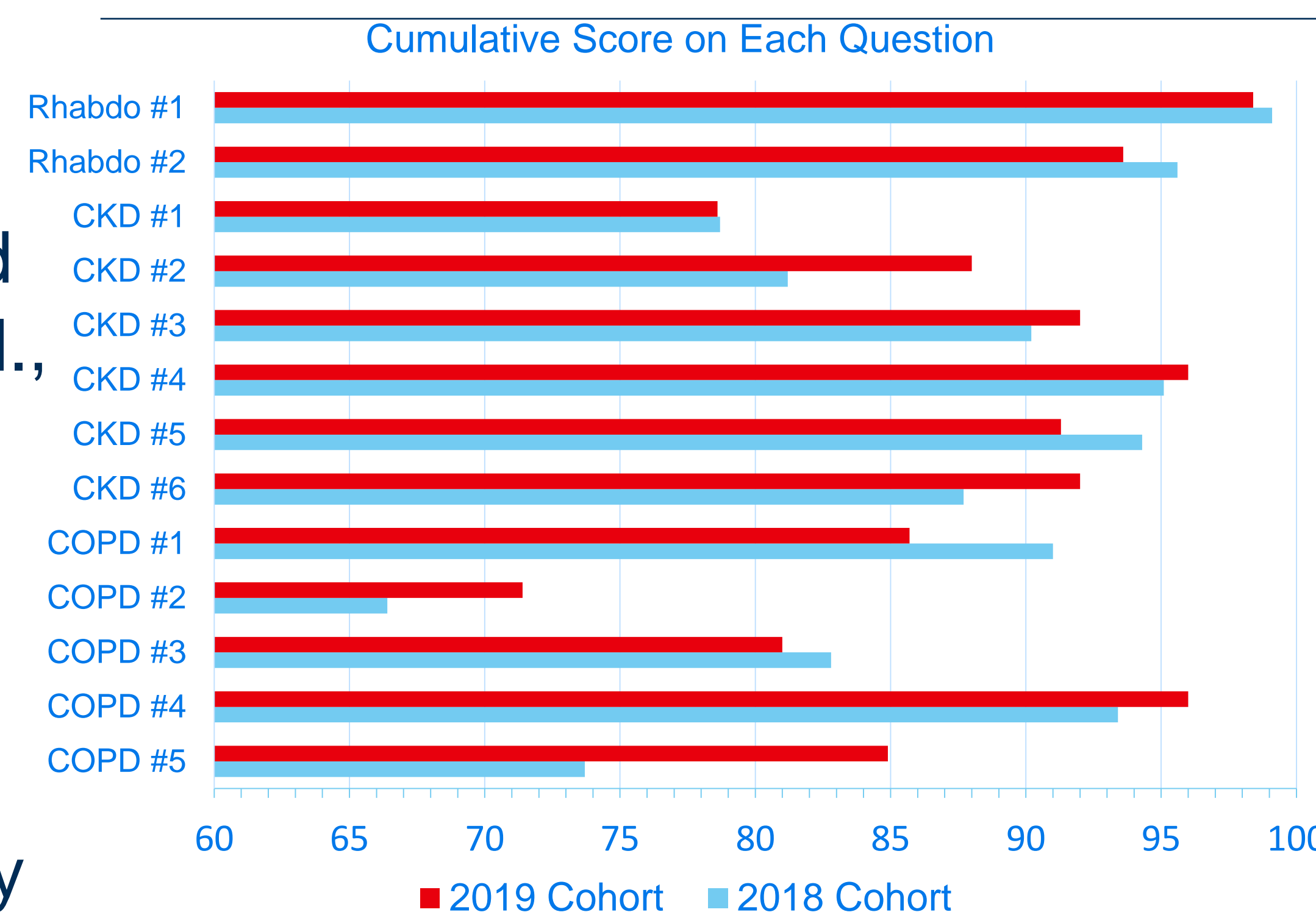


Chart 1. Quantitative Data

Chart 1, Students from the 2019 cohort who observed in-class simulations outperformed the 2018 cohort who received only lecture as their method of learning. Cumulatively there was a positive 19.7% increase in scores for the 2019 cohort.

Table 1, reflects the student survey responses. Students responded with 86.4% viewing in-class simulation observation and debriefing as a positive learning experience. Also, 76.27% of students subjectively felt they had increased their knowledge related to the content after the in-class simulation program.

Survey Data (n=59)	Agree	Disagree
The in-class simulation experience provided me a valuable learning opportunity.	81.36%	18.64%
I feel like I had a positive learning experience with the in-class simulation experience.	86.44%	13.56%
I was uncomfortable watching simulation and debriefing my own classmates.	13.56%	86.44%
It was difficult for me to notice all the learning opportunities happening in the simulation because I was focused too closely on certain aspects of care.	27.12%	72.88%
The in-class simulation experience increased my knowledge of nursing care and pathophysiology knowledge.	76.27%	23.73%

Table 1. Qualitative Data

Conclusions

- The findings from this study fill a gap in the extant literature by indicating that in-class simulations are an active learning strategy that improves knowledge among pre-licensure nursing students.
- Findings also indicate that students view it as a positive learning experience that increases understanding of nursing care and pathophysiology, which supports increased utilization of in-class simulations among pre-licensure nursing programs.
- Further research is warranted to explore the transferability of these results to clinical practice settings.

References

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