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Impact of High-Fidelity Simulation on Teaching Medical Nursing

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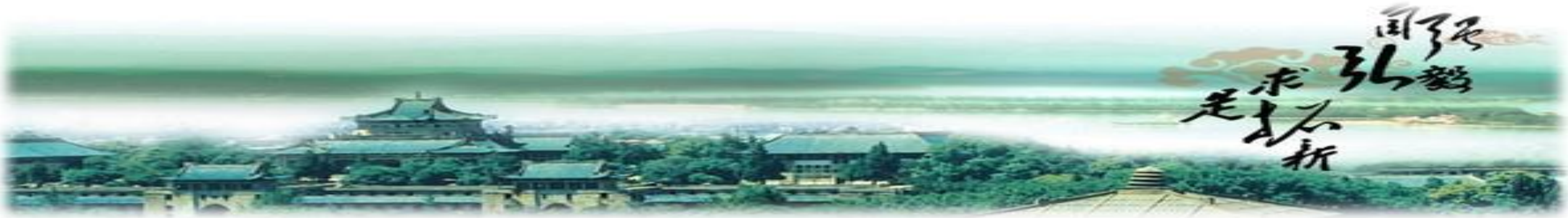


Objective

- The purpose of this study was to examine the High-Fidelity Simulation to improve disease-related knowledge level of junior students in a Bachelor of Science in Nursing program and to explore the students evaluation on High-Fidelity Simulation

Methods

- The study used a within-group, pre-post test design with twenty-three students of a nursing school in central city in China
- Students were divided into four groups of five to six students
- Facilitated by the same teacher, the four groups performed simulations in four different days

Methods

- For each group, three simulation scenarios with high-fidelity simulator were implemented
- In each group, students alternated to practice as the nurses in three scenarios
- At the end of the simulations, every student performed as the nurse and the observer

Methods

- The three scenarios were designed based on the case of a patient with Chronic Obstructive Pulmonary Disease (COPD)
- The objectives of the simulations were to take care of the COPD patient with acute exacerbation and perform individualized health education
- COPD-related knowledge questionnaires were used to measure the knowledge level before and after the simulations

Methods

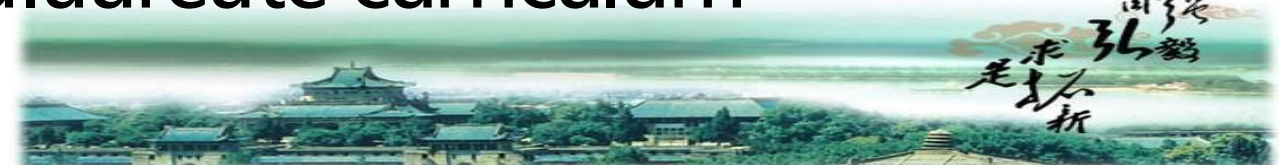
- students' perception of High-Fidelity Simulation
  - The Student Satisfaction and Self-confidence in Learning Scale (13 items)
  - The Simulation Design Scale (20 items
  - The Educational Practices in Simulation Scale (16 items)
- Completed at the end of the simulations to measure

Results

- The student knowledge increased significantly from pretest to posttest
- All the simulation scales are five-Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*)
- The means and standard deviation of the three scales were 4.28±0.45, 4.32±0.44 and 4.39±0.50 respectively

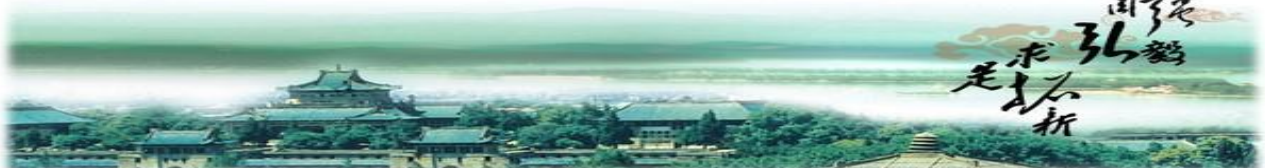
Conclusion

- In this study, High-Fidelity Simulation can significantly improve the disease-related knowledge of junior BSN students
- High-Fidelity Simulation received relatively high scores for students' satisfaction and self-confidence
- Student perceived high-fidelity simulation as an effective teaching strategy
- However, further study is needed to explore the specific way it integrates with baccalaureate curriculum



Summary

- High fidelity Simulation was used as a strategy to teach Medical Nursing Course
- Twenty-three junior baccalaureate nursing students participated and completed the knowledge questionnaire before and after the simulation
- Significant improvement of knowledge level showed after simulation. In addition, students perceived simulation as an effective and positive teaching method



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Thank you so much!!