



**HKU
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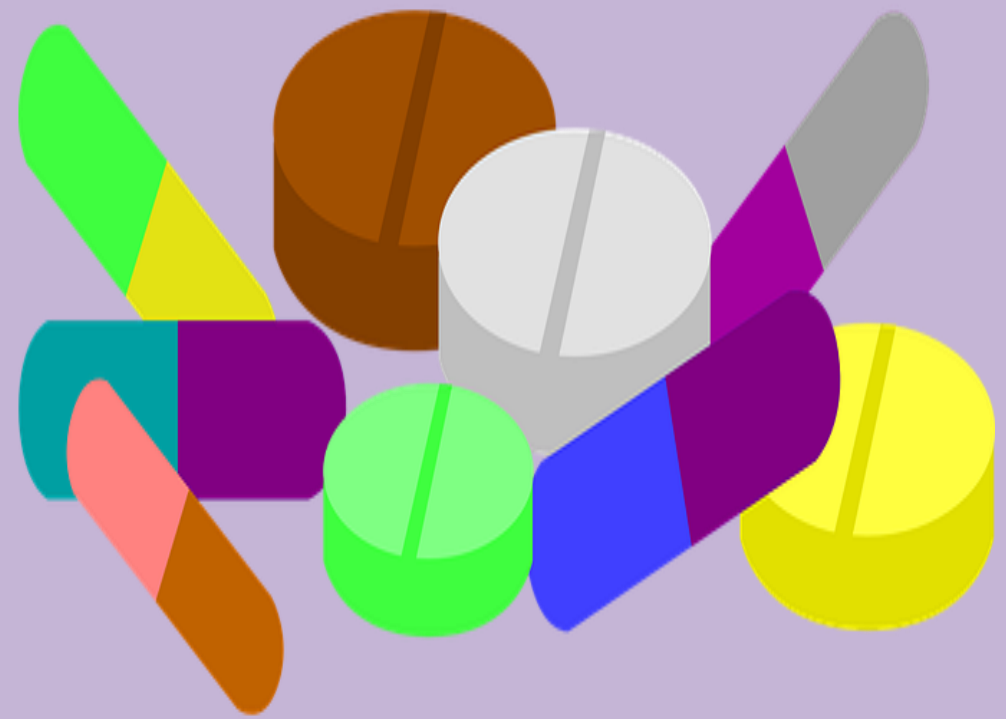
Effectiveness of Inquiry-Based Learning in a Simulation Environment to Enhance Advanced Pharmacology in Emergency Critical Care Patient Management

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Enhance and reinforce nursing students in learning effective medication use

Pharmacology



Emergency critical care patient management

Critical Care



Using Inquiry-Based Learning (IBL) approach

IBL



Thinking simulation environment (TSE)

Simulation



IBL-TSE

Three learning outcomes:

- Consolidating existing pharmacokinetic knowledge
- Deepens the application of advanced pharmacokinetic principles in emergency care
- Fostering the ability to self-construct new knowledge.
- Two clinical case scenarios:

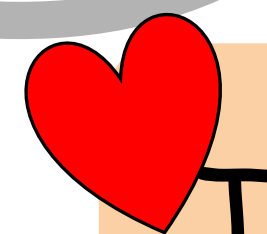
Methods:

- Total of 31 participants completed 4 modules:
Module 1 – Cardiogenic Shock; Module 2 - Bridging Theory to Practice – Simulated Hands-on Experience in Managing Cardiogenic Shock with Inotropic Pharmacology; Module 3 - Epilepsy with Seizure; Module 4 - Epilepsy and Seizure Management with antiepileptic pharmacological Treatment

Thank you,
HKU TDG
Funding



Thank you,
my team.



Gibbs' Reflective Cycle

Students to critically evaluate their experiences, bridging the gap between theoretical knowledge and practical application. Students describe their actions, understanding the patient's condition and prioritizing care.

Explore

Their feelings about the experience, often express uncertainty in reacting promptly and making the best clinical decisions.

Students describe their actions, such as understanding the patient's condition and prioritizing care. They also acknowledge the role of simulation exercises in providing foresight and practice in emergency scenarios.

Acknowledge

Nursing students also acknowledge the role of simulation exercises in providing foresight and practice in emergency scenarios. The evaluation phase enables students to identify what went well and what did not. They report consolidating pharmacological knowledge and patient assessment skills, yet they struggle with prioritizing nursing care due to insufficient knowledge.

Conclusion

Allows students to summarize their learning, noting the importance of making correct choices and learning from their mistakes to improve patient outcomes. The final action plan focuses on what students would do differently, emphasizing repeated practice and careful consideration of questions. Students recognize the need for developing their skills through deliberate practice, ensuring they can act confidently in real-life emergency situations.