Evaluating the Effectiveness of a Blended Approach to Simulation: A Quality Improvement Project Using Traditional and Extended Reality Simulation in an ABSN Obstetric Course

BACKGROUND

Obstetric clinical experiences often provoke student anxiety due to unpredictability and limited exposure. Simulation bridges the gap between theory and practice, promoting skill development. A blended approach using Mixed Reality (MR) and traditional manikin simulation may enhance readiness and reduce anxiety.

FRAMEWORK

UTAUT Model: Evaluates technology acceptance and user performance expectancy.



NLN Jeffries Simulation Theory: Supports learner-centered, interactive simulation design. METHODS

Setting:

25 ABSN students in OB/Women's Health Nursing Practicum

- MR Simulation: Focus on preeclampsia management
- Manikin Simulation: Focus on obstetric care **Data Collection Tools:**
- Pre/Post-Test Assessments Simulation Effectiveness
- Tool Modified (SET-M) NGN-style exam questions • Analysis: Descriptive and thematic statistical analysis
- NGN Style Questions

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- Statistically significant improvements (p < 0.001) in:
 - Prioritizing care
 - Managing client needs
 - Clinical judgment
 - Communication skills
- Positive SET-M feedback indicating perceived simulation effectiveness
- NGN exam: No significant differences between intervention and control groups



SPECIAL THANKS TO...



Working Through Birth Process

Visual of Clinical Presentation



Strengthened clinical judgment and psychomotor skills Enhanced visualization of symptoms and disease progression Fostered a more confident and prepared nursing student Effective for improving readiness in obstetric clinical settings despite no NGN score differences





CONCLUSION