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Elevating Family Nurse Practitioner Training with Telehealth Simulation: A Model for Implementation

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Background and Significance

- Telehealth usage has expanded significantly, particularly following the COVID-19 pandemic, yet many FNP programs have not kept pace with this shift in clinical practice.
- Despite the demand for telehealth-proficient providers, FNP students often lack formal training or exposure to virtual care environments during their education.
- The absence of structured telehealth instruction contributes to limited student confidence and preparedness in delivering virtual care upon graduation.
- This gap is especially important in rural and underserved areas where telehealth may be the only viable option for patient access to care.
- Simulation offers a safe and effective way to introduce telehealth concepts and allow students to practice communication, assessment, and decision-making in a virtual format.
- Incorporating simulation-based telehealth training allows educators to prepare FNP students for evolving practice environments while meeting expectations of healthcare institutions.

Purpose

- Design and implement a telehealth simulation that addresses the gap in FNP student preparedness for virtual care.
- Enhance student confidence and proficiency in telehealth communication, assessment, and decision-making through simulation-based learning.
- Align simulation activities with INACSL Standards of Best Practice to ensure structured, evidence-based integration into the FNP curriculum.

Methods

- A telehealth simulation scenario was developed using a primary care case focused on chronic disease management and virtual patient assessment.
- 26 FNP students participated in the simulation as part of their first core FNP course in a graduate nursing program.
- Faculty served as standardized patients and facilitators, providing a realistic virtual interaction and guided learning experience.
- A structured debriefing using the PEARLS framework followed each simulation, encouraging reflection and reinforcing learning.
- Student perceptions of confidence and learning were measured using the Simulation Effectiveness Tool – Modified (SET-M).

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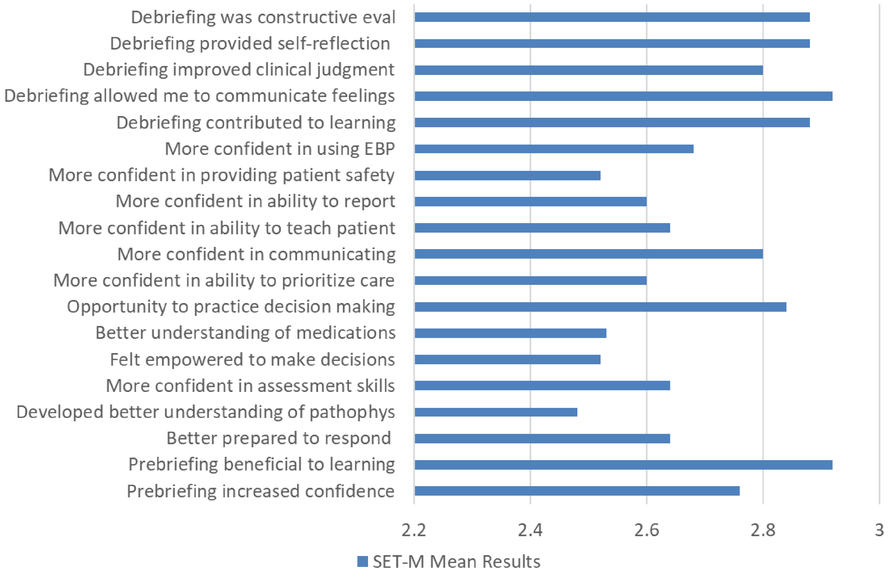
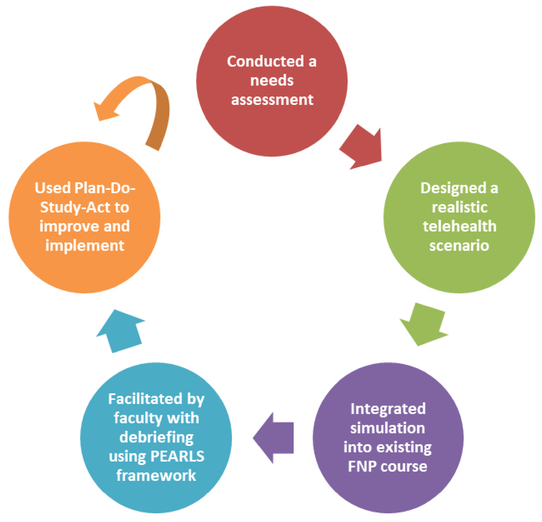
Results

- 26 FNP students completed the telehealth simulation and participated in the post-simulation evaluation using the SET-M instrument.
- Students reported increased confidence and improved ability to conduct telehealth visits following the simulation.
- All participants agreed or strongly agreed that the simulation enhanced their learning, ability to communicate effectively in a virtual setting, and clinical decision-making skills.
- Qualitative feedback supported the value of the simulation in preparing students for real-world telehealth encounters.



Steps to Develop and Implement



Theoretical Framework

- Lewin's Change Theory guided implementation through unfreezing (gap identification), change (simulation delivery), and refreezing (curriculum integration).
- The NLN Jeffries Simulation Theory informed learner-centered design, including prebriefing, active simulation, and structured debriefing.
- The PDSA cycle supported continuous improvement through planning, testing, evaluating, and refining the simulation experience.

Discussion

- SET-M results showed high agreement (means 2.48–2.92), indicating improved student confidence, skills, and readiness for telehealth.
- Significant correlations revealed that stronger prebriefing and assessment confidence were linked to better communication and clinical decision-making.
- Limitations included a small sample size and no long-term follow-up.

Conclusion

- Integrating telehealth simulation into FNP education addresses a critical training gap by enhancing student confidence and readiness for virtual care.
- Structured simulation, guided by theoretical frameworks and best practices, provides a safe and effective environment for skill development.
- Continued use and refinement of telehealth simulation can strengthen clinical preparedness and support evolving healthcare delivery models.
- Evaluation tools like SET-M offer valuable insight into learner outcomes and inform ongoing improvements in simulation design.

References