Examining Communication Confidence in Nurse Practitioner Students Using Virtual Simulations

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Introduction
➢ The COVID-19 pandemic has decreased primary care and mental health care access and services across the globe (Gilfillan, 2020; WHO, 2020).
➢ Disparities have increased significantly in access and affordability due to the limited access to services, especially in rural areas (Gilfillan, 2020; Kim, Marratt, & Conigliaro, 2020).
➢ Lack of confidence undermines student’s learning and jeopardizes the therapeutic relationship for the clinician and patient.
➢ Evidence showed simulation improves confidence, self-efficacy, and decision-making skills in nurse practitioner students (Ok, Kutlu, & Ates, 2020).

Research Question
➢ Do virtual patient simulations positively impact self-efficacy in communication confidence for nurse practitioner students?

Purpose
➢ Adequate preparation and training of nurse practitioners are paramount to aid access and service for primary and mental health care. A critical component of providing healthcare is establishing therapeutic communication and building the patient-provider relationship.
➢ The purpose of this study examined the effect of virtual simulation on nurse practitioner students’ communication confidence in providing healthcare and building patient relationships.
➢ Pilot Study conducted June 2021

Participants
➢ All nurse practitioner students participated in virtual/telehealth simulation
➢ The sample for this pilot was NP students who volunteered to participate and completed the Pre-Post SE-12 Questionnaire

Design & Instrument
➢ Quasi-experimental using SE-12 instrument (Cronbach’s 0.95, Loevinger’s coefficient 0.17) completed Pre and Post Simulation
➢ The SE-12 measures communication confidence using a 10-point scale
➢ One open ended question was offered for qualitative feedback

Procedure
➢ Virtual Simulations used Zoom and AmWell Telemedicine carts with Standardized Patients and Faculty Observers
➢ Patient encounters were conducted via telehealth over 20-minutes
➢ SE-12 questionnaire results were analyzed with descriptive and inferential statistics

Demographics

<table>
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<th>Gender</th>
<th>Male</th>
<th>Female</th>
<th>Prefer not to Say</th>
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<td>PMHNP</td>
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<td>Ethnicity-Race</td>
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<td></td>
<td>50%</td>
<td>15.5%</td>
<td>12.5%</td>
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</tbody>
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Results
➢ Nurse Practitioner students (n = 16) scored 0.33 points higher on the overall (cumulative) mean on the SE-12 Post Questionnaire although statistical significance was not demonstrated.

Qualitative (Narrative) Feedback included:
➢ “Helpful to gain new experience”
➢ “Really helpful to have experience to prepare for real-world practice”
➢ “Would like to receive more guidance and practice to conducting a successful telemed visit”
➢ “Nerve racking but went better than I expected”
➢ “It was an awesome program, highly recommend it”
➢ “Really helpful to have experience to prepare for real-world practice”

Communication Confidence Overall Mean Scores

<table>
<thead>
<tr>
<th></th>
<th>Pre Simulation</th>
<th>Mean</th>
<th>Standard Deviation</th>
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</thead>
<tbody>
<tr>
<td>SE-12</td>
<td>6.39</td>
<td>1.55</td>
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</tr>
<tr>
<td>SE-12</td>
<td>6.72</td>
<td>1.14</td>
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SE-12 Individual Item Mean Scores

Clinical Significance & Implications for Practice
➢ This pilot study demonstrated a positive improvement in reported communication confidence and self-efficacy after using virtual simulation.
➢ NP student narratives indicated:
   ➢ a positive learning experience.
   ➢ additional training in virtual and telehealth simulations was recommended.
➢ In the Pre-Questionnaire, 8 of the 17 items had some participants score themselves as a 10, yet in Post-Questionnaire no participants scored themselves as a 10; suggestive of self-awareness of communication confidence.
➢ The simulations introduced NP students to the modality of telehealth to further prepare them for innovative patient care.

Conclusion
➢ Virtual patient and telehealth simulations are an effective method to promote communication confidence for nurse practitioner students.
➢ Nurse practitioner programs should consider virtual and telehealth platforms for enhancing communication between provider and patient.
➢ Recommend further research with increased sample sizes
➢ The integration of telehealth as a standard component of the NP curriculum

Limitations
➢ Sampling, convenience and voluntary
➢ Self-reported data may be subject to bias
➢ Small sample size in pilot (n = 16)
➢ Familiarity and comfort levels with technology
➢ Generalizability is limited by small sample size and single implementation site

References