



Telehealth Integration in Undergraduate and Graduate Nursing Curricula

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Objectives

Launching into Telehealth

2020 Northeast/Mid-Atlantic Virtual Telehealth Conference



JUNE/JULY 2020

- Discuss findings from an integrative review of the state of telehealth in nursing curriculums
- Discuss the outcomes and impact of the integrative review
- Explore the effectiveness of using a standardized patient actor during simulation for Tele-behavioral health practicum



Qualitative Study Aim

- To introduce the use of telehealth, an electronic information and telecommunication technology to provide and support long-distance clinical health care, patient and professional health-related education, public health, and health administration.
- Presentation will be in two parts
 - Part I: Undergraduate
 - Findings from the Integrative Review
 - Impact and outcomes before and from the Integrative Review
 - Part II: Graduate
 - Review two types of simulated telehealth case assessment for students enrolled in an online graduate nursing program

Part I: Undergraduate Education

- Findings from the Integrative Review
- Impact and outcomes before and from the Integrative Review

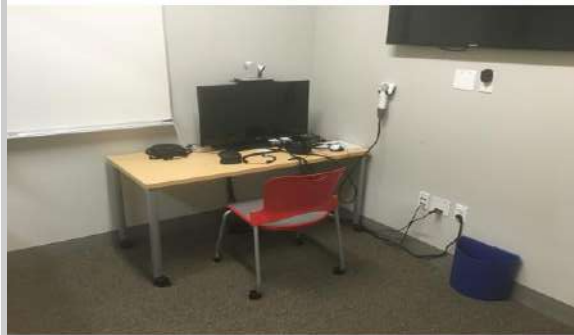
Telehealth Telemedicine and Telenursing

- Telemedicine (telehealth) is “the use of electronic information and telecommunication technologies to support long-distance clinical health care patient and professional health-related education, public health, and health administration” (Health Resources and Services Administration or HRSA, 2020, p. 1).
- Telenursing is the use of “technology to deliver nursing care and conduct nursing practice” (Schlachta & Sparks, 1998, p. 558).

Finding from the Integrative Review

Lack of Knowledge among Faculty and Students on the use of Telehealth in Nursing Education

The Telehealth Pilot in our Undergraduate program:



Physical assessment course
Community Clinical Practicum course.

Use of Simulation to Teach Telehealth Techniques

Theoretical Frameworks Guide to Telehealth Integration

Collaboration to Ensure Successful Implementation of Telehealth Content in Undergraduate Curricula

Integrative Review Outcomes and Impact

Outcomes and Impact of the Integrative Review

- Telehealth pilot integration
- Research study on the conceptualization of telepresence- submitted for publication
- Integrative review - submitted for publication
- Manuscript in progress - Hamilton's TeleNursing Framework
- Revising an application for an internal UMASS Amherst grant
 1. To conduct a telehealth needs assessment/qualitative study of practicing registered nurse to assess their telehealth needs
 2. To conduct virtual telehealth symposium for nursing educators and nursing students

Telehealth Mapping

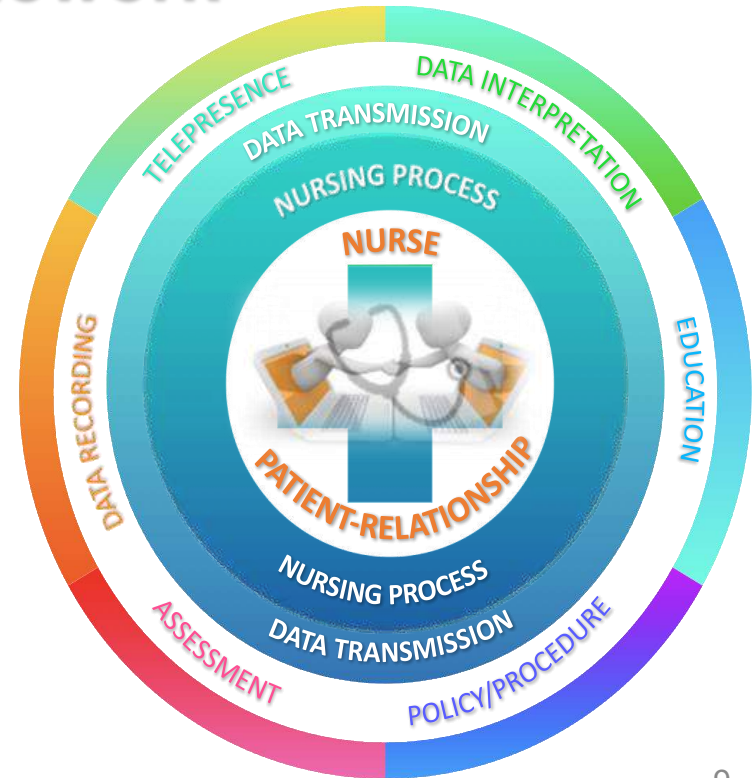
UMassAmherst

Undergraduate Traditional	Rationale	Undergraduate Accelerated	Rationale	Graduate DNP course	Rationale
212 Cultural Diversity in Health and Illness	Introduction to telemedicine and its use to decrease local and global health disparities	N304 Nursing Perspectives	Introduction to telemedicine and its use to decrease local and global health disparities	Developing a Telemedicine course to be taught in the DNP program (PostMasters –Informatics certification)	Course will teach nurse practitioners how to use telemedicine to care for patients Course will also teach educators how to teach telemedicine to nursing students
398S Health Assessment	Telehealth has been successfully piloted into Health Assessment By Dr. DeMartinis and Dr. Green	398S Health and Physical Assessment lab	Telehealth has been successfully piloted into Health Assessment By Dr. DeMartinis and Dr. Green	N721 & N643 Psychiatric mental health Nurse practitioner program	Telemedicine has been successful piloted into the program by Dr. Abelard and Dr. Hamilton
398E Principles of Nursing Care: Practicum	Will be piloted into the pediatric lab	N 407Clinical Practice I	Successfully piloted into Fundamental lab By Dr. Hamilton and Christine Callahan	Plans to pilot Telemedicine integration into the Family Nurse practitioner track	
327 & N398G Psychiatric-Mental Health Nursing and Practicum	Will be piloted in the fall into the psychiatric curriculum to teach student about victims of sexual Assault-TeleSANE-4hours. By Dr. Hamilton	N437 Clinical Practice III	Successfully piloted into advance medical –surgical Dr. Hamilton and Christine Callahan	Plans to pilot Telemedicine integration into the Gerontology Nurse practitioner program	
398F Nursing Care of Children: Practicum	Will be piloted into pediatric practicum	398F Nursing Care of Children: Practicum	Successful piloted in pediatric lab By Dr. Hamilton and Christine Callahan		
498T Community Based Care: Practicum	Piloted in Community simulation successfully Dr. Hamilton and Lucy	N498T Community Nursing: Practicum	Successful piloted in Community simulation successfully Dr. Hamilton and Lucy		

Hamilton's TeleNursing Framework

Peplau's Theory of Interpersonal Relations

Delone & McClean's Model



Hamilton's TeleNursing Framework

- 
- 1 Nurse Patient-Relationship
 - 2. Nursing Process
 - 3. Data Transmission

- Policies and Procedures
- Education
- Telepresence
- Assessment
- Data Interpretation
- Data Recording

Outcomes and Impact of the Integrative Review Cont'd

- Future plans
 - To develop a Telepresence framework
 - To develop Telenursing instrument to evaluate nursing students use of telehealth
 - Approval for full Integration across nursing curricula

Part II: Graduate Education

- Summarize two types of simulated telehealth case assignments for students enrolled in an online graduate nursing education program

Graduate Simulation

1. Synchronous Simulation using a Standardized Patient Actor

In Person

Via Telehealth

2. Asynchronous Simulation

Voice Thread



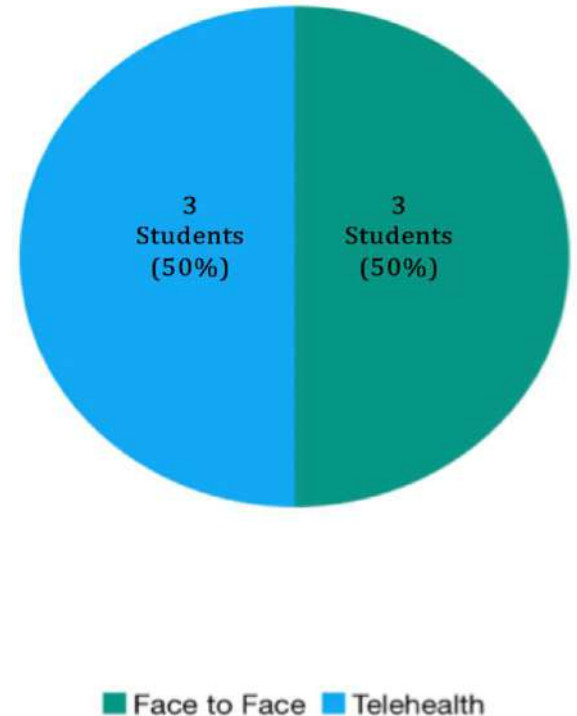
UMASS Amherst Simulation Lab,
Tower Square, Springfield Ma.

Synchronous Simulation Standardized Patient

Objectives

- Assess the experience of six Doctor of Nurse Practice Psychiatric Mental Health Nurse Practitioner (PMHNP) students following a case assessment interview with a simulated patient actor
- Assess the effectiveness of using a standardized patient actor face-to-face or via Telehealth
- Explicate areas of needed research, training, and course adaptation.

Where Did The Simulation Take Place?



Background:

- There is limited research or information available regarding the experience of graduate psychiatric nursing students
 - who are using videoconference technology Tele behavioral Health
 - face-to-face communication with a standardized patient actor
- Simulation-based learning (SBL) is a helpful and effective teaching-learning-evaluation strategy available in nursing education
- Simulation can be challenging to implement in an online nursing program due to geographic location of students, time zone, and student schedules
- It is essential to find effective simulation methods for online psychiatric nursing students to practice their learned skills in preparation for clinical practice.

Methods



- Six PMHNP students enrolled in graduate Complex Health Course in the UMass Amherst psychiatric DNP program participated in a simulated practice change initiative with a follow up survey evaluation.
- Three students conducted a face-to-face interview with a standardized patient actor who played the role of a patient with bipolar disorder.
- The other three students conducted the same case interview via a zoom video conferencing platform.

Simulated Actor

- The actor remained seated in the simulation room while the faculty stayed on the other side of the two-way mirror.
- The Telehealth simulations took longer than the face-to-face simulations due technological problems

Online Survey

- Approval was obtained by UMASS Amherst IRB
- Electronic informed consent obtained
- Anonymous online Survey Monkey 20 questions
- •Anonymous online Survey Monkey 20 questions, two parts

Online Survey Part I

Question	Yes	No
B) Have you taken part in a simulation with a simulated actor in the past?	0	6
C) Do you believe face-to-face encounters can be as effective as telehealth encounters?	5	1

Online Survey Part II

- 17 Questions
- Agree/disagree 5-point Likert scale.

Question/Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1) I clearly understood the purpose and objectives of the simulation exercise	0	0	0	1	5
2) The scenario presented represented a real-life situation	0	0	0	1	5
3) The debriefing discussion after the simulation was constructive	0	0	0	1	5
4) I felt that the learning environment was safe	0	0	0	1	5
5) I would like to participate in another simulation	0	0	2	1	3
6) As a result of the simulation experience, I have increased my confidence in my ability to complete a patient assessment	0	0	0	2	4
7) As a result of the simulation experience, I have increased my confidence in my ability to recognize when a patient is in distress	0	0	0	2	4
8) As a result of the simulation experience, I have increased my confidence in my ability to prioritize and provide interventions for a patient in distress	0	0	0	1	5
9) As a result of the simulation experience, I have increased my confidence in my ability to anticipate the needs of other team members in an emergent situation	0	0	1	1	4
10) I would like to participate in another simulation experience	0	0	0	3	3
11) As a result of the simulation experience, I have increased my confidence in my ability to communicate efficiently and effectively with other team members in an emergent situation	0	0	2	1	3
12) The facilitators were knowledgeable about the patient care situation/s	0	0	0	1	5
13) The simulated actor played a realistic role for the session	0	0	0	1	5
14) The facilitators made me feel comfortable	0	0	0	1	5
15) The simulation experience was presented in a realistic environment	0	0	0	1	5
16) The location and time scheduled for the simulation was convenient for me	2	1	0	0	3
17) The session lasted about the right amount of time	0	0	0	2	4
TOTAL	2	1	5	21	73

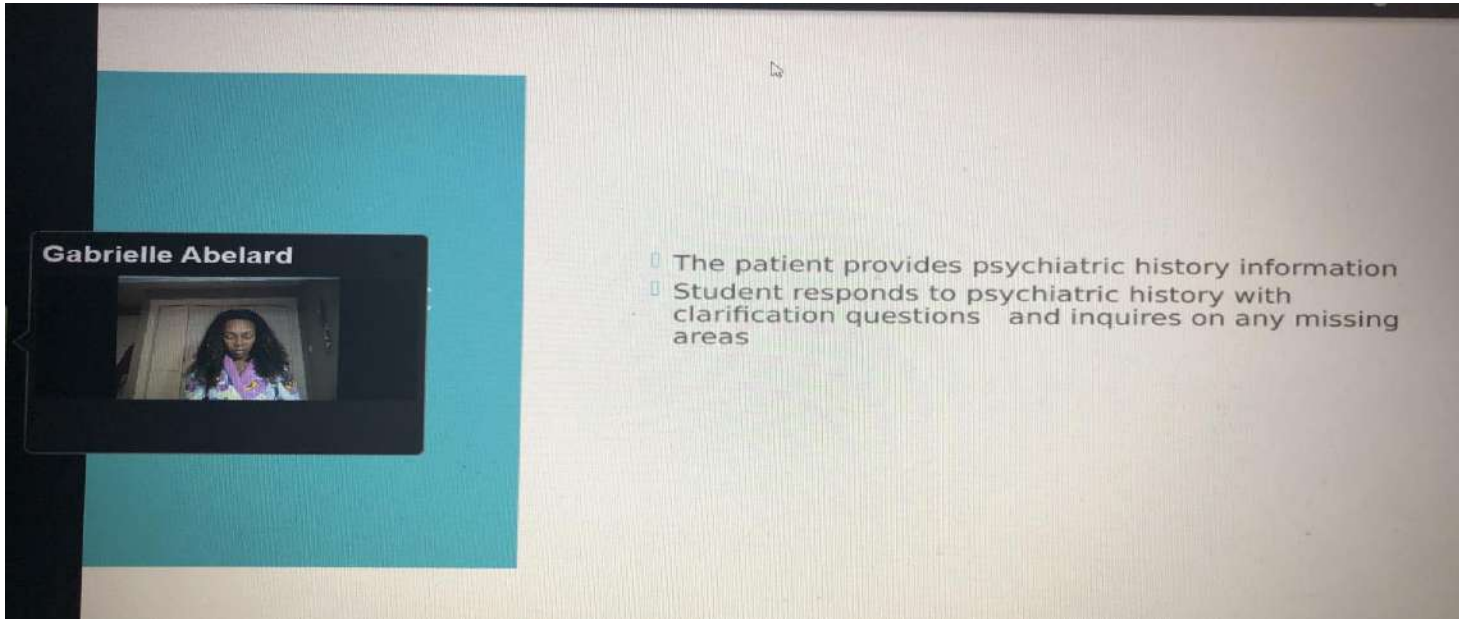
Survey Result Themes

- Increased Confidence (n=4) agreed or strongly agreed, neutral (n=2) that they increased their confidence in most of areas following the simulation.
- 100% of student participants agreed strongly or agreed
 - Environment was realistic and the simulation lasted an appropriate length of time
 - Facilitators and the patient actor were appropriate for and knowledgeable about simulation
 - Debrief with patient actor was helpful**

Findings

- All six students took part in an anonymous online survey regarding their experience with the simulation based learning experience.
- Student participants revealed high satisfaction with the simulation experience both face-to-face and via Telehealth.
- The highest satisfaction rate was found with the debrief experience, and most students reported wanting more case simulation in the graduate program.
- 2/3 students who drove to campus strongly disagreed that the location worked for them
- All three students who participated in Telehealth strongly agreed the virtual platform for them worked well for them

Voice Thread A Virtual Asynchronous Simulation



Gabrielle Abelard

- The patient provides psychiatric history information
- Student responds to psychiatric history with clarification questions and inquires on any missing areas

Voice Thread Asynchronous Simulation

Two parts

1. Students participated in virtual Case Assessment during a one-week period via Blackboard utilizing Voice Thread Application
2. Written self- review of Case Assessment due one week later

Virtual Case Assessment

- Students provided with two vignettes to prepare for case assessment
- Faculty selected one of the following scenarios
 - 22-year-old, African American male junior in college who identifies as female with active Suicidal thinking, increase in sleep, social isolation, and poor self-care. Chief Complaint, “My parents don’t understand me, and I feel like I can’t be who I am, I do not want to be in this life anymore!”
 - A 40-year-old Caucasian female with no history of mental health issues and or hospitalizations who presents with symptoms of paranoia, insomnia, and recent erratic behavior. Chief Complaint, “I feel like my heart is racing and someone is going to kidnap me. Someone is watching me”.

Voice Thread Case Assessment Video

- <https://echo360.org/media/40788b5b-92eb-40de-814c-c96064b3bb90>

Student Evaluation

Pts	Criteria Students will be evaluated on the following criteria:	Notes
5	Professional Introduction to patient	
5	Review of Confidentiality and Privacy	
5	Overview of expectations of session	
5	Identification of Chief Complaint	
5	Identification of past psychiatric problems and or family history	
10	Assessment of Safety Risk	
5	Identification of current medications	
5	Identification of current medical issues	
5	Assessment of drug and alcohol use	
5	Assessment of lifestyle (diet, sleep, exercise, hobbies)	
10	Completion of mental status exam	
10	Provider body mechanics and eye contact	
10	Case Formulation	
10	Provider overall response to standardized patient	
5	Provider explanation of next steps	

Student Discussion Forum Feedback

- *I most appreciated being able to formulate interview questions based on the patient's responses.*
- *I also appreciated being able to hear and see back questions and responses. It gives one an opportunity to reflect on opportunities for improvement.*
- *I most liked (of course not when I was doing it) was there was only minimum necessary information so you had to do several differentials in your mind and think critically.*
- *I also really liked that it was an actual person speaking versus us just reading from a piece of paper.*

Conclusion

- Case simulation with a standardized patient actor is an effective form training and can be successfully implemented in person and or via Telehealth
- Simulation can also be effective using other methods such as Voice Thread Technology.
 - Class discussion forum regarding assignment overwhelmingly positive by 28 students participants
- Fall 2020 Launch of new Synchronous Simulation study!

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Questions?





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How would you rate this session overall?
☆☆☆☆

How would you rate the presenter(s)?
☆☆☆☆

How would you rate the relevance of the content to your work?
☆☆☆☆

Please provide any additional thoughts or comments about this session:
*Please keep your response.

Submit

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Thank You!

