

Sigma's 30th International Nursing Research Congress

Relationship Between a Sensory Immersion Experience Simulating Dementia and Health Science Student Perceptions of Empathy

Shelley Caswell Moore, PhD, MSN, RN

Lisa Kay Murphree, EdD, MSN, RN

School of Nursing, Middle Tennessee State University, Murfreesboro, TN, USA

Purpose:

The purpose of the current project is to implement the Virtual Dementia Tour with baccalaureate nursing and speech language pathology and audiology (SLPA) students, examining its effects on student empathy before and after intervention. The study will be implemented in three phases over 18 months. The effects of a didactic course alone will also be measured, so as to see which makes the greatest difference: didactic course alone, or didactic course with VDT added.

The world's population is rapidly aging. Globally, the number of persons older than 60 by the year 2050 will have doubled from the year 2010 (World Health Organization, 2015). Although many older adults get dementia (now called neurocognitive disorder), it is not a part of normal aging. The World Health Organization (WHO) recognizes dementia as a public health priority. Currently there are around 50 million people suffering from dementia. Dementia takes its toll on persons who have it, their families and caregivers, and society at large. Alzheimer's is the most common form of dementia and may contribute to 60 – 70 % of cases. Dementia is a leading cause of disability and dependency among older people. There is often a lack of awareness and understanding of this devastating syndrome in which there is a deterioration in cognitive function that affects memory, thinking, orientation, comprehension, calculation, learning capacity, language, judgment and ability to care for oneself.

There is no cure for dementia. Humane, respectful, compassionate, and supportive care for persons with dementia and their families is essential. Healthcare professionals need to possess sensitivity, caring, awareness and empathy to provide high quality care to persons with dementia. These concepts are difficult to teach in a traditional classroom. In fact, some experts contend that "the 'softer' nursing qualities such as empathy and listening ...are at odds with 'academic' nursing related to technology and biomedical aspects of care (Digby et al., 2016. P. 53). Research has demonstrated that "immersion experiences" have significantly influenced perceived caring in undergraduate nursing students (Sanders, 2016). Studies of effects of immersive simulation (specifically a simulation called the "Virtual Dementia Tour" by Second Wind Dreams) on undergraduate social work students illustrate an increase in students' empathy with, understanding, and sensitivity to older adults with dementia (Donahoe, et al., 2014; Werner et al., 2014). Additional research on virtual dementia simulation includes results from a study of medicine and pharmacy students demonstrating that a virtual dementia experience was perceived to positively impact students' self-reported knowledge and attitudes towards people with dementia. The majority of these students found the experience useful, innovative, and engaging (Gilmartin-Thomas et al., 2018). More research is needed on interventions to address the need for person-centered care.

Methods:

A quasi-experimental, pre-test post-test study design will be used. Empathy will be measured pre-Gerontology course and post-Gerontology course for the nursing students to assess effects on empathy of the course alone. Empathy will be measured pre-Diagnostics course and post-Diagnostic course for the SLPA students to assess effects on empathy of the course alone. Once the VDT intervention is added, pre and post VDT measures will be done. Mixed methods and repeated measures will be used for data analysis. Multiple regression will also be applied.

Schema:

Comparison of means between two different groups: 1) Didactic course only (control group) versus; 2) didactic course plus Virtual Dementia Tour immersion (intervention)

Comparison of differences within same group (both the control group and the intervention group comparing empathy at the beginning of the didactic course and at the end of the didactic course to determine if the course alone has an effect; the intervention group pre and post VDT immersion will also be measured once the intervention is introduced)

Sample – convenience sample, non-randomized. Approximately 120 nursing (NURS) students and approximately 60 speech language pathology/audiology (SLPA) students

Independent variable – the Virtual Dementia Tour (sensory immersion simulation)

Dependent variable – empathy

Co-variates – NURS or CDIS course, gender, prior BS degree, academic minor, age, currently working in a direct care job, previous experience in direct care

Mixed measures:

- VDT survey (qualitative and quantitative), which has 11 pre-test and 8 post-test items. 5 Likert-type questions are on both pre and post tests. A check-all-that-apply question regarding behaviors is included in both pre and post tests,. 5 demographic questions are on the pre-test that are not on the post-test. 2 open-ended questions are on the post-test that are not on the pre-test. This will be given immediately before and immediately after the intervention.
- Kiersma-Chen Empathy Scale (KCES) (quantitative), which has 15 Likert-type questions.

Results:

At the time of the Congress 2019 July Sigma Conference, descriptive data on the Spring 2019 semester control group for both nursing and SLPA students will be available. The KCES will be administered the first day of the Gerontology class and the last day of class to assess effects on empathy of the course alone, and these data can be shared. The SLPA data will not be available yet because they are using a spring/summer cohort of students due to scheduled course offerings. Nursing is using a spring cohort of students. No VDT intervention activity will take place until the Fall 2019 semester because the equipment and the training is not yet available at time of this abstract submission. We anticipate a summer 2019 purchase and training of faculty.

The Virtual Dementia Tour (VDT) intervention will be implemented with the Fall 2019 nursing students only, as the SLPA course during which these students will participate in the project will not meet.

Conclusions: At the time of the Congress 2019 July Sigma Conference, conclusions about the effects of a didactic course alone on student empathy, on both nursing and SLPA students, will be available for review and discussion. Comparison of means can be explored between the nursing students and the SLPA students. Pre-didactic course and post-didactic course data from the KCES can be shared. The VDT intervention will not have occurred yet in this phase of the study.

Title:

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Keywords:

dementia, neurocognitive disorder, empathy, sensitivity, awareness and sensory immersion, virtual dementia tour

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Abstract Summary:

This is a learning activity for undergraduate health science students (nursing, and speech language pathology and audiology) designed to increase sensitivity and awareness of what it is like to be an older adult with dementia. The intervention involves sensory immersion, and students will be measured pre and post for empathy.

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Dementia

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Conclusion

First Primary Presenting Author

Primary Presenting Author

Shelley Caswell Moore, PhD, MSN, RN

Middle Tennessee State University

School of Nursing

Associate Professor

MTSU

Murfreesboro TN

USA

Author Summary: Dr. Moore teaches nursing courses at Middle Tennessee State University. She received her nursing education in both New York and Florida. Her PhD is in International Health Education and Research. Her program of research includes: decisional involvement, shared decision-making, structural empowerment, Magnet® culture, critical thinking, health science reasoning, high fidelity simulation, teamwork, and virtual dementia immersion experience on empathy. She has also published numerous clinical articles on women's health topics, dementia, and C-difficile.

Second Secondary Presenting Author

Corresponding Secondary Presenting Author

Lisa Kay Murphree, EdD, MSN, RN

Middle Tennessee State University

School of Nursing
Assistant Professor
Murfreesboro TN
USA

Author Summary: Dr. Murphree has provided care to adult acute care patients for 22 years at the bedside as a critical care staff nurse and an additional nine years as a clinical instructor on a medical-surgical unit supervising baccalaureate nursing students for Middle Tennessee State University. She is nationally certified in medical-surgical nursing. She graduated in 2018 with an educational doctorate and Nurse Educator focus from the University of Alabama.