Dementia is a rapidly expanding global issue with over fifty million people worldwide living with this condition and ten million new people diagnosed each year (World Health Organization, 2017). Given the vast number of people living with dementia and an anticipated rise in prevalence, it is inevitable that most nurses will be working with people with dementia at various times in their career (Scerri, Scerri, 2013). It is concerning that globally, many studies are finding that nurses and nursing students are lacking sufficient knowledge of dementia (Scerri, Scerri, 2013; Wang, Xiao, Wang, Li, Yang, 2017). Additionally, many sources identify that nursing students report little interest in the field of dementia care, or the broader field of geriatrics. In response to this, a variety of international studies have attempted to enhance knowledge and interest in the field. Most research assesses baseline knowledge, exposes participants to a lecture or workshop and subsequent clinical experience with people with dementia, and then re-test knowledge and in some cases interest in the field. Lecture or workshop education on dementia has not proven to be sufficient and the incorporation of experiential learning was imperative (Kimzey, Mastel-Smith, Alfred, 2016). Integration of an additional clinical experience is time intensive and not feasible within most nursing program curriculum due to competing requirements and priorities. When clinical placement is not a feasible solution, how do we change the lack of knowledge and interest in caring for this expanding population? Are there other potential teaching strategies that may provide this experiential learning opportunity?

Technology is increasingly utilized in learning settings, in particular with simulated learning and immersive learning, which has proved to be an effective teaching approach (Farra, Smith, Ulric, 2018). Virtual reality is one such example of experiential learning now accessible in classroom settings. Smart phones are an ever-present accessory of students, and virtual reality goggles are a tool that are now seen as affordable addition to learning environments (Brown, Green, 2016). In pondering this, the investigator wondered if an immersive virtual reality simulation would fill the above mentioned gap and began to examine options to do this.

Alzheimer’s UK has created a freely available app called “A Walk Through Dementia” that allows users to experience what it is like to be “Mary”, the person with Alzheimer’s. This app is available for download at no cost to users of android and apple technology. The app can be viewed through the phone where the user manipulates the phone around to see a three hundred and sixty degree view of what Mary sees, or they can be viewed through virtual reality goggles which enhance the experience of the three dimensional image and manipulates the screen with a turn of the head.

The researcher set out to study the impact of these virtual reality experiences on students’ dementia knowledge and attitudes. Research ethics board approval was obtained to study this teaching strategy in first year and fourth year nursing students with a potential population of over 140 participants. For the purpose of the study, participants complete the Dementia Knowledge Assessment Scale (Annear et. al.,

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2017) and the Dementia Attitude scale (O'Connor, McFadden, 2010). Students are then exposed to the three virtual reality video clips produced by Alzheimer’s UK on the app. Following these video experiences there is a debrief to discuss observations and learnings with no formal lecture provided. Students are then asked to complete the Dementia Knowledge Assessment Scale and the Dementia Attitude Scale again and one additional reflective survey on the use of virtual reality in the classroom. This will demonstrate if this experience impacts their dementia knowledge or attitudes, and if it does, in which particular ways. Anecdotally, student engagement and self-reported learning thus far has been high in this virtual reality experience. Data collection is still underway and will be completed in February of 2019. Analysis will occur in the spring of 2019 with full results available for this poster presentation.

Highlights of this poster will include an introduction to the use of virtual reality in the classroom, support of the need for dementia knowledge, and findings determining if this virtual reality experience influenced participant’s knowledge and attitudes of dementia. Additionally, the virtual reality goggles themselves will be available for congress participants to take a moment to immerse themselves in the perspective of Mary from Alzheimer’s UK to see how this might impact themselves personally or in their role as educator, manager, nurse, and leader.

Title: Expanding Consciousness: Experiencing the "Virtual" Reality of Life With Dementia

Keywords: dementia, experiential learning and virtual reality

References:
Abstract Summary:
Virtual reality (VR) is an accessible technology for experiential learning. Learn how this technology has been used to explore dementia, an area frequently found to be lacking sufficient knowledge and interest in nursing. Data about the experience of VR and the impact on dementia knowledge and attitude will be highlighted.

Content Outline:
Introduction: Overall context of dementia knowledge and attitude and virtual reality technology as an experiential learning tool.
1. Introduction to virtual reality (VR) and VR goggle technology (for contextual understanding)
2. Introduction to dementia knowledge and attitude research (for contextual understanding)
   Main point #1: VR in the Classroom (enhance clarity of how this technology was used)
   1. Class set-up and technology requirements (serves to show details for potential replication)
   2. Details of the App used for this VR experience (serves to show details for potential replication)
   3. More in depth Description of the class design (Also serves to show details for potential replication and to provide good context of what was done)
   Main point #2: Research Design and Methodology
   1. Highlight research design and methods for clarity (mixed methods study with quantitative pre- and post- surveys and a reflection on VR in the classroom for qualitative experiential data)
   2. Identify any limitations noted
   Main point #3: Research Results
   1. Dementia Knowledge Results (highlight if there was a change in dementia knowledge in participants from prior to VR experience and post- and if there is a change, in what domains of knowledge within the survey are these in. This will serve to demonstrate if students' knowledge about dementia changes from the VR experience)
2. Dementia Attitude Results (highlight if there was a change in dementia attitude in participants from prior to VR experience and post. This will serve to demonstrate if students' attitude about dementia changes from the VR experience)

3. Highlights of student reflections on VR in the Classroom (This will be a thematic analysis of students’ self-reported experience using this technology in the classroom)

Conclusion:
1. Main findings and summary (no data available yet but predict this as answering the question “Would I do this again?” and if yes “What would I do the same or different based up on the data”.

2. Future Recommendations

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Author Summary: Lisa is currently an Assistant Professor at MacEwan University with over a decade of teaching experience. She has a passion for teaching and learning with new technologies and methodologies. She has a proven interest in doing research to determine the efficacy of these teaching innovations which she demonstrated in three previous Scholarship of Teaching and Learning research studies. Research is Lisa’s favorite way of ensuring she never stops learning.