

# Leveraging virtual reality to train certified nursing assistants as essential dementia-care personnel in the age of COVID-19

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## Abstract

**Background:** COVID-19 has placed an extraordinary and disproportionate level of responsibility and risk on certified nursing assistants (CNAs) caring for persons with dementia (PWD) relative to their training, resources, and compensation levels. Nearly one-quarter of COVID-19 deaths in the United States have been nursing home residents and staff. Despite providing the majority of direct care, CNAs are amongst the most under-resourced and under-trained frontline workers. Given their essentiality, it is critical to support CNAs during the COVID-19 pandemic. The purpose of this work is to provide CNAs with a space to strengthen their knowledge and confidence in caring for PWD. This pilot study applies a virtual reality (VR) curriculum to train CNAs regarding the lived experiences of PWD and their loved ones. The VR vignette portrays a Latinx woman, Beatriz, through progressive stages of Alzheimer's disease.

**Method:** Chicago Methodist Senior Services (CMSS) CNAs were recruited (N=7; 86% female, 86% Black) for a seven-week online training program consisting of 1.5 hours per week. Each class included a didactic lecture and an Embodied Labs VR module depicting a first-person experience of dementia through a distributive model approach. The program concluded with two recorded focus groups. Participants completed the UCLA Geriatric Attitudes Scale, a dementia knowledge assessment, the Interpersonal Reactivity Index surveys, and a COVID-19 Impact questionnaire. Current analyses include qualitative content analysis for focus group data and descriptive, quantitative statistics for pre-and post-VR intervention surveys.

**Result:** Preliminary results demonstrate that CNAs endorsed a positive change in attitudes toward older adults ( $p=0.069$ ), a deepened understanding of dementia, and increased confidence in caregiving skills. Focus groups allowed CNAs to discuss changes in resident behavior and support one another through a virtual platform during a global pandemic.

**Conclusion:** Combining traditional didactic lectures with VR-based curricula provided CNAs with foundational knowledge and first-hand experience of dementia pathology. Participants reported greater levels of insight and empathy for PWD. Future aims include expansion of training content to include end-of-life conversations, LGBTQIA aging, and Lewy body dementia.