Dementia is a longterm brain disease that causes one to forgot memories and lose cognitive abilities. There is currently no known cure for Dementia, but treatments exists to improve the lives of those affected by the disease and others around them. It's common for those with Dementia to get agitated or upset as it can be very confusing and frustrating to live in a world that you are slowly forgetting. Current treatments attempt to explore the past of the patient. Those who have Dementia tend to forget new experiences but still hold on to old memories. Reminiscing of those times improves mood and other quality of life improvements.

VRTU has developed an application that allows a patient to put on a VR headset and experience HQ scenes that pertain to the past. An example shown on their website is what an average day at the beach would have looked like in 1950s London.

What I really enjoy about the headset is how it ties caregivers in as well. A caregiver is able to use a tablet to also see what the patient is seeing through VR, and the app gives suggestions on questions or conversation topics to bring up with the patient that relate to the scene. As enjoyable as VR can be, it is very fun to experience a virtual world with others. I think that allowing caregivers to interact is also beneficial because being the child, relative, or caregiver of someone with Dementia can be at times very frustrating as communication can be difficult because the patient may be frequently agitated and have a hard time communicating.

Another use of this application is not just communication between caregiver and patient but communication between multiple patients. A care home can take multiple patients into one room and run the same scene in the application for each patient. Now the patients can talk with each other and share their own memories, which might spark memories and feelings in others.

The application provides not only new routes to communication but new routes for care. When a caregiver interacts with the patient through VR, they can learn about other interests the patient has through conversation and can include those interests into their treatment. I.e If you are in an old bedroom and ask a patient what their first record was, you might discover they are a huge Elvis Presley fan and then can incorporate his music into other treatments.

One might think that the intended audience for this application is not too technologically savvy, as it is the common experience for older people, and that they will have trouble using the application. I think training care homes and elderly homes to handle the equipment is an excellent idea as it allows patients to put on



a headpiece and immediately begin using the application, without prior knowledge.

Initially I was worried about the limited scene library that comes with the application, and if at least one familiar scene exists for each user. After further research, I found out that the application frequently updates its library. Overall, I think this application is a great new tool for treatment of those with Dementia and can vastly improve the care those patients get.

Sources:

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