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The Impacts of Occupational Therapy and Assistive

Devices on Patients with Alzheimer's Disease: A Literature Review and Comprehensive

Interview

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Lee Honors College Thesis Project

Abstract

Occupational therapy and the assistive devices that are recommended provide an outlet to a better quality of life for individuals with Alzheimer's as well as increases safety and independence in the individual. Alzheimer's disease is a progressive neurodegenerative disorder that affects an individual's memory, physical functioning, safety, and cognition. As the disease progresses, it decreases an individual's level of independence in their environment and often calls for outside care to successfully complete the daily skills and activities needed to age successfully. The practitioners that work with individuals who have Alzheimer's aim to improve the completion of activities of daily living as well as socialization, independence, and the general welfare of their consumers. The relationships that are formed through occupational therapy services creates a lifelong impact on both the patient and the practitioner, as the occupations that give Alzheimer's patients' meaning are found again and completed to the satisfaction of the consumer. Occupational therapists often recommend devices and technologies that act as an aid in the consumer's life and allows them to partake in occupations independently or with minimal assistance. The goal of this literature review and comprehensive interview is to inform its audience on the importance of occupational therapy in the lives of Alzheimer's patients and educate on the forever impact of the services that occupational therapists provide for their consumers.

The Impacts of Occupational Therapy and Assistive Devices on Patients with Alzheimer's Disease

Introduction

Occupational therapists provide a direct impact on the lives of Alzheimer's patients through the usage of therapeutic techniques and assistive technology to help make participating in life's meaningful occupations easier on the persons whose lives are affected. Alzheimer's disease is a neurodegenerative disorder that impairs a person's social and occupational functioning in their daily lives. It significantly alters the cognitive and behavioral abilities of a person as well as hinders them from pursuing a life that is meaningful to them. Because there is no cure, it grows increasingly difficult for the families and members of the population for whom it affects as time and the disease progresses. With the help of members of the health and medical fields, family members and friends work collaboratively to help those with Alzheimer's transition into their new manner of life. Occupational therapists are one of the members of the interdisciplinary teams in healthcare that directly support and help transition people who have Alzheimer's disease into their new way of living. Occupational therapists have been working with members of the community with Alzheimer's disease for generations to help them live meaningful lives on their terms and to make them more comfortable with the everlasting changes occurring in their life. With the direct support from the occupational therapist as well as the prescribed assistive devices used in the homes of the patient, the patient will have a greater meaning for life and motivation for completing life's daily occupations needed to survive.

Literature Review

History of Alzheimer's Disease. Alzheimer's disease was first discovered in 1903 by a German Dr. Alois Alzheimer, for whom the disease is named for. Alois was working with an older female patient who presented as having an unknown mental illness, with symptoms including severe memory loss, aphasia, and unpredictable behavior. Dr. Alzheimer studied the woman for many years yet could not get beyond a diagnosis of common dementia. The woman was an older adult and lived for several years after being studied by the doctor. However, after she passed away, she was found to have amyloid plaques covering her brain tissue as well as severe brain tissue deterioration and atrophy. (Heerema, 2020) Since then, the diagnosis of Alzheimer's disease has grown increasingly prevalent in all cultures, ethnicities, races, and countries throughout the world.

Alzheimer's disease is an irreversible and progressive brain disorder that affects as many as 5.8 million people in the United States alone. The disease is characterized by the progression of brain deterioration due to amyloid plaques and neurofibrillary tangles which eat away at the brain tissue throughout the last few years of life. Alzheimer's is characterized by symptoms such as memory loss, language complications, and unpredictable behavior. It is a subtype of dementia, which is a broader category of memory loss, that includes other subtype diagnoses such as Lewy Body Dementia, vasculature dementia, and mixed dementia. (Alzheimer's Disease Education & Referral Center) Dementia can range in its severity from person to person, but the most common form of dementia is Alzheimer's disease. (Alzheimer's Disease Education & Referral Center) Throughout the rest of the world, it is estimated that roughly 48 million people are affected by Alzheimer's disease, and that number is expected to triple by the year 2050. (Brasure et al. 2018) Because the prognosis of Alzheimer's is so severe, it makes getting care for older adults who are

at risk that much more critical. It is not always easy to spot in loved ones because it is just a slip in memory at the moment, but when it starts to get more severe and puts them at risk of their safety, it is especially important to see medical and professional help. Alzheimer's is most prevalent in adults over 85, but can affect adults as young as 65 years. (Alzheimer's Disease Education & Referral Center) This type of Alzheimer's is called Early-Onset Alzheimer's. It is diagnosed most often before the age of 65 and progresses as the adult is aging. Age is the most frequent risk factor for the disease, and as age increases, so does the risk of Alzheimer's. The effects of early onset Alzheimer's for families is severe and definitely takes a toll on the lifestyle of the patient as well as those who surround them. It could be family, friends, and caregivers who notice the slow decline in cognitive ability, but the sooner it is noticed, the easier a diagnosis and prognostic care will be for the future of the patient.

Progression of Alzheimer's Disease. The disease that affects so many out of the population has a few different stages that are characterized by the progression of the disease through the individual. There is much debate in the scientific world about how many progressive stages of Alzheimer's there are, but Mayo Clinic focuses on five main stages that patients often go through consecutively as they age. The first stage is called preclinical Alzheimer's Disease. This stage is mostly identified through research settings and is the silent stage in which the disease progresses before symptoms start to arise. It is highly improbable for the patient or the patients surrounding family and friends to recognize any symptoms, which is why it is mainly found in research settings where the patient receives an MRI to identify the presence of protein deposits in the brain. The proteins, called amyloid-beta, are important biomarkers for Alzheimer's disease that appear in this stage, but are still small enough to where they do not create any symptoms within the patient. (Mayo Clinic) This stage can last for years at a time, and

possibly even decades before progressing into the next stage. The stage that comes after preclinical Alzheimer's disease is called mild cognitive impairment due to Alzheimer's disease, and is still uncommonly diagnosed within this time. This stage is categorized by noticeable cognitive impairment in aspects such as memory and awareness. The changes are not yet significant enough to affect relationships, work, or daily tasks yet, but the person whom it affects is having multiple lapses in memory in terms of appointments, conversations, or recent events. Another aspect of cognitive ability affected by this stage of Alzheimer's is deducing how much time is needed for an errand or event. For instance, the time it takes to get ready in the morning may be underestimated due to the disability to remember tasks, where items are located, or the goal of getting ready in the first place. (Mayo Clinic) Another common instance is having difficulty with the sequencing of steps related to completing tasks, such as brushing teeth or showering. This becomes increasingly difficult as the disease progresses and causes major disruptions in the patient's lifestyle.

The progressing stage of Alzheimer's that succeeds mild cognitive impairment is called mild dementia due to Alzheimer's disease. In this stage of the disease, the person is having noticeable and significant troubles with memory loss and thinking which impacts their ability to function in their home environment, work setting, and relationships. The symptoms that often characterize this stage are: memory loss (particularly with recent events), difficulty with problem solving, completing complex and multi-step tasks, making sound judgements, organizing as well as expressing thoughts, and changes in personality. (Mayo Clinic) Individuals in this stage may start to change and become more withdrawn in socially demanding situations and show reduced motivation for completing tasks due to the pressure and demand without understanding on their end.

After the stage of mild cognitive impairment due to Alzheimer's disease, the progressing stage is called moderate dementia due to Alzheimer's disease. This stage of the disease is characterized by many of the same symptoms as mild cognitive impairment but is more severe and requires more caregiving and depending on loved ones. One of the symptoms includes deepening confusion and poor judgement which causes the loved one to easily lose track of the date, time, season, and place where they are. (Mayo Clinic) They often may confuse family members names with other family or confuse family friends with their own family members. This can be especially hard on the family of the person who has Alzheimer's as their personality changes and they forget their closest family members who care for them, are with them often, and provide emotional support for them. When the disease progresses to this stage, it becomes pressing for the family to seek caregiving for their loved one. Whether it is an in-home caregiver, getting their home evaluated for safety by an occupational therapist, or providing home modifications to ensure ease and safety while maintaining independence, it is crucial for the family and friends to be supportive of the individual throughout their journey. Along with the symptom of confusion and poor judgement, other symptoms include greater memory loss, needing assistance with their daily activities, and extreme changes in behavior and personality. With greater memory loss comes forgetting personal details about their own lives, including their phone number, address, hometown, and what their home looks like. This symptom impacts the person in a complicated and emotionally taxing way that causes the individual with Alzheimer's to easily get lost while in public, forget where they are, and become confused and unable to find their way home. The individual with Alzheimer's disease is unlikely to understand the changes going on within their lives and are less aware of the diseases' severity and outcome as the family members. This is perhaps the most difficult aspect of having a family member with Alzheimer's,

as it creates a noticeable gap in the relationship and causes stress and hardship on the family members as the disease progresses further.

The last stage of Alzheimer's is called severe dementia due to Alzheimer's disease and causes the affected to generally lose the ability to effectively communicate coherently, require assistance in all aspects of personal care and activities, and a significant decline in physical ability. In this stage, individuals with Alzheimer's can no longer hold a consistent conversation, but instead speak in single words or phrases, they require assistance in occupations such as dressing, preparing meals, eating, using the toilet, and mobility. Along with the aspect of decreased mobility and function, the person may suddenly become unable to walk independently and without support. In severe cases, the individual has difficulty controlling their bladder and bowels and suffers many unintentional accidents as well as has internal issues with swallowing and dysphagia. At this point in the progression of the disease, it is crucial for some provided extra care for the individual with dementia, as it can be tough on family members to care for their parents as well as their own children if they have any.

Occupational Therapy Interventions for Individuals with Alzheimer's. There are multiple different ways to provide care and companionship while maintaining safety for the older adult while also ensuring proper socialization and relationship building for the individual. Some of the options for older adults with dementia and Alzheimer's include senior day services, in-home caregivers, respite care, long-term residential care, and hospice care. (Care Options, 2021) All of these options range in cost, independence for the individual, and the ability to remain in their own home. While some of the conditions listed above require the individual to move into a new place where they can be continuously monitored, the main goal is for the older adult to remain as independent as possible while maintaining safety. This goal can be achieved through the

assistance of several different care providers, but occupational therapists play a significant role in supporting individuals with Alzheimer's disease through all phases of the progressive disease. (Crowley 2008)

One of the biggest influences on the health and safety of Alzheimer's patients is occupational therapy. Occupational therapy is the profession of, "helping people across the lifespan participate in the things they want and need to do through the therapeutic use of everyday occupations". (What is Occupational Therapy?, 2021) In this profession, the occupational therapist can teach several different interventions that contribute to the overall health and safety of all patients no matter the ability. Some of the common occupational therapy interventions used across all ages include: aiding children with disabilities with schoolwork and participation in social environments, helping injured patients recover from trauma through the regaining of necessary life skills, and providing support and comfort for older adults who are experiencing cognitive and physical changes as they age.

Older adults with neurocognitive disorders such as Alzheimer's and dementia experience complications performing their daily activities of living that give them meaning and purpose in their life. Individuals with dementia experience frequent trouble with misplacing items, solving problems in a range of minute to severe, and completing daily routines. If utilized, occupational therapists can use effective strategies that will assist the individual to safely achieve their goals through participation in their occupations. Occupational therapists and other related practitioners utilize the understanding of daily activities and occupations into eight main areas of proficiency. Those areas are: rest and sleep, activities of daily living (ADL), play, education, work, socialization, and instrumental activities of daily living (IADL). However, only four of these proficiencies are commonly utilized by occupational therapy practitioners working with

individuals who have Alzheimer's disease. (Letts et al. 2020) Activities of daily living is one of the areas that are most worked on with these individuals and encompasses activities such as eating, bathing, dressing, and toileting. These activities become increasingly harder for individuals with Alzheimer's as the disease progresses, so it is crucial for the occupational therapist to assist with these activities with their patients. Similar to ADL's is IADL's, which comprises activities such as managing a household, meal preparation, cleaning, driving, and managing money. While these activities may not be as pressing as ADLs in the individual's life, they are equally important to the individual, as it gives their life meaning that they are able to participate in these types of activities for themselves. Other important aspects that occupational therapists work on with Alzheimer's disease patients would be leisure and social participation. Leisure includes activities that individuals do for pleasure in their free time that they highly enjoy. This would be one of the main areas that occupational therapists would work on for individuals with Alzheimer's because this often is what the individual will be the most motivated by. It could be talking about their hobbies, showing them a collection they have, or reminiscing on past memories for comfort. The occupational therapist will utilize strategies to include leisure in the other aspects of daily living like ADLs and IADLs so that the individual will stay motivated to work on the therapeutic techniques. (Smallfield 2017) Social interactions and participation includes engaging with friends, family, caregivers, and the community. Because caregivers and family are often the main support system for people with Alzheimer's disease and other related memory impairments, it is imperative that interventions and education take place to keep these social roles a priority in the individual's life. While these strategies and focus' are important to keep in mind when working with an individual who has Alzheimer's disease, the primary focus of the occupational therapist and any occupational therapy assistants would be the

patient's safety. There are several different ways that the occupational therapist and their assistants may help people who have Alzheimer's disease, but home assessments and skills interventions are the most popular and profound way to make an improvement in the overall safety and quality of life that the individual is reaching for. (Padilla 2011)

Occupational Therapy and Assistive Technology. Occupational therapy intervention and assessment focuses on tasks in which a physical or cognitive decline is noticed in a patient. The initial decline could be noticed when it comes to the individuals' safety, home management skills, driving aptitude, and the work environment of the individual. Wherever the decline is first noticed is often where the occupational therapist will first address the individual's ability to complete tasks. In an assessment, the individual's ability to initiate a task, sustain it, and complete a task is monitored for the level of functioning that the individual has. (Occupational Therapy Services for Persons With Alzheimer's Disease and Other Dementias, 2020) Along with the monitoring of skills, the occupational therapist will make a note of the tasks that the individual can complete on their own with both ease and safety as well as the tasks that the individual needs assistance on, does not perform safely, or has trouble with independently. For tasks that individuals with Alzheimer's may need help on, the forms of assistance that are noted in a typical assessment are if supervision is needed to complete a task, tactile, verbal, or other prompts, physical guidance, and then physical help. There are several different assessment tools that occupational therapists may use to evaluate a patient depending on their needs and occupational goals. Along with the assessments that occupational therapists do of client homes and their level of functioning, the therapist may recommend several assistive devices to help the patient navigate their environment with ease and independence. (Occupational Therapy Services for Persons With Alzheimer's Disease and Other Dementias) Assistive technology is defined as

an item or piece of equipment that is used to modify, increase, maintain, or improve the functionality and independence of individuals who have disabilities. (Akyurek, 2017) Some of these devices include items such as wheelchairs, canes, shower grab bars, elevated toilet seats, and weighted eating utensils. The goal of recommending assistive devices is to make the consumer more accessible to their environment and the community through independence. (What is AT?) While some older adults may need levels of assistance completing activities such as eating, toileting, and transferring, others may not need that same level of assistance.

Occupational therapists provide an evaluation of the various needs of a client and then proceed to help the consumer select the appropriate device for them, provide support for the consumer and their families, and educate the caregivers and family on the new assistive technology and how to use it properly for their loved ones. The demand for each consumer varies based on the functionality that the patient has while competing tasks both independently and with assistance. The role of assistive technology is not to adapt for missing functions of a patient, but instead it is used as a support system to help aid in independence. (Akyurek 2017) Multiple aspects of occupational performance are impacted by the implementation of assistive technology. Mobility is one of the most pressing problems that occupational therapists address in patients that they work with who have Alzheimer's disease. Because mobility is such a large aspect of everyone's quality of life, it is crucial that occupational therapists aid the patients in navigating their environment successfully. Alzheimer's disease can impair an older adult's cognition and understanding of their environment, so working adamantly to improve safety and independence through mobility is a popular intervention strategy.

Impacts of Intervention on Patients and Families. Occupational therapists and occupational therapy assistants work diligently with their patients to create a difference in their lives that will

last a lifetime. Whether their patients are young or older, the strategies and intervention techniques that the therapists use will help to improve the individual's overall quality of life as well as occupational performance in their daily life. The safety of families' loved ones with Alzheimer's is often the main concern. Occupational therapists utilize new and creative techniques to improve safety in the older adult's community that allows the consumer to perform their everyday skills with more independence and reliability on the welfare of the individual. (Letts 2011) Families often rely on healthcare providers such as occupational therapists and occupational therapist assistants to promote socialization, improve functioning, and educate the patient and caregivers on how to better care for individuals with Alzheimer's as the disease progresses further. The relationships that are established between the occupational therapy practitioner and the individual with Alzheimer's creates a lifelong impact on the patient as they have learned how to better navigate their new environment while living with a degenerative disease. The families and patients are forever impacted by the care and compassion that has been displayed, that as a result creates a better quality of life for the individual and puts ease on their families.

Comprehensive Interviews with the Occupational Therapist/Occupational Therapy

Assistant

Note: Names of the interviewee's have been changed for privacy reasons.

Interview 1

1. What is your full name and title?

My name is Lauren Cooke, and I am a COTA. I went to OTA school in Tennessee and still reside there to this day working in a psychiatric hospital.

2. Is it okay if I use your name in my thesis paper? It has the potential to be seen by two occupational therapy professors and the honors students at Western Michigan University.

Yes, that is fine as long as it will not be publicized to the general public. If so, please change my name.

3. For how long have you been an occupational therapist assistant?

I have been an occupational therapy assistant now for three and a half years and graduated from OTA school in 2017.

4. How long have you worked with older adults who have Alzheimer's?

I have worked with adults who have Alzheimer's and major neurocognitive disorders for a little over two years now. I worked in several different nursing homes as well as a psychiatric hospital that I currently work at where individuals with Alzheimer's were being treated.

5. What is particularly difficult about working with people who have Alzheimer's?

One of the aspects of working with individuals with Alzheimer's that is the most difficult is their underdeveloped skills after deterioration from the disease has progressed. As an OTA we have to find creative ways of working around the progression of Alzheimer's and find a way to combat the standard treatment strategies that they may not be able to perform well in. The most difficult aspect of working with Alzheimer's patients for me has been the lack of patient understanding of treatment. I have tried many different methods of education to help the patients understand, but sometimes they cannot understand the why behind therapy or think it is too childish when we want to implement strategies.

6. Is it any different than working with a cognitively aware adult? Why?

It is absolutely different. Adults with memory impairments require more assistance and education about how occupational therapy will help them to perform life skills. Sometimes they are stubborn and do not want to go through with therapy because they think it is childish and unnecessary. It makes it hard for providers like me to work with them when they refuse to participate, and with a cognitively aware adult it is easier to inform them on why therapy is beneficial and to know that they understand how this will help them. However, getting to work with adults who have major neurocognitive disorders has taught me patience in being a healthcare provider and has taught me new strategies to use when working with Alzheimer's patients.

7. How do you provide comfort and reassurance to the caregivers and family members of the adults who have Alzheimer's?

Recently due to COVID-19, we have not had a lot of contact with family or other caregivers except for other staff members. However, before COVID-19, the most

important aspect of my job was reassuring family members that the treatment we do will help improve the lives of their loved ones. A lot of family members that I have worked with come to visit their family and are disappointed by the progression of their disease. However, the family members do not get to see a large part of the therapeutic process that we do with the patients.

8. Have you ever prescribed any assistive devices to improve safety and functioning to individuals with Alzheimer's?

Personally, I have never prescribed any devices for Alzheimer's patients, but I have worked with patients who used assistive devices like walkers, canes, wheelchairs, and grab bars in their homes. Most patients that I see who have Alzheimer's are completely ambulatory or independent with the usage of an assistive device. The majority of older adults with Alzheimer's that use an assistive device also have a comorbidity that prohibits them from full range of motion or steadiness. Some adults I have worked with have weighted utensils that they use for eating because they also have Parkinson's disease. I have also worked with older adults who use elevated toilet seats so that they do not have to lower themselves down to the height of a normal seat in fear of not being able to get back up. That being said, I haven't seen many older adults with Alzheimer's be completely dependent on a device, but I also have not worked with many adults whose disease has progressed to the point of little physical mobility.

9. What are some of the most effective strategies for working with people who have Alzheimer's disease?

The most effective strategy that I have used so far as a COTA would be redirection and education. Sometimes patients with Alzheimer's get confused by the education and techniques that we are trying to implement in therapy, so I often use redirection or get them to engage in a conversation with me while we are working. Many of the patients that I have worked with over the course of my career like to tell stories about their past. As a provider, I support them through their storytelling because to them, that is their present moment and not their past. They need a bit of extra love and support where others may just ignore them. We also use these stories that they tell as a motivation technique and have them tell us stories of their past as we go through the treatment for the day. Along with redirection comes encouragement and motivation. Because the patient has a major neurocognitive disorder, it can be difficult to engage them in the therapeutic techniques we are working towards. The education is more directed at the other staff that care for the patient because they often do not follow techniques and strategies we try and implement after we leave. For repeating patients that we see, we like to establish rapport with them and make sure the patient is comfortable throughout our interventions that we perform.

10. Have you ever experienced burnout as a COTA caring for someone with cognitive memory impairment?

Absolutely. I have experienced burnout several times over the course of my career, which is why it is incredibly important to take care of yourself outside of work. We spend a lot of our days caring for others but often forget to care for ourselves.

11. How would you rate your job satisfaction when working with people who have Alzheimer's?

My job satisfaction is incredibly high. Of course we have days that a patient is not responding to redirection and would like to utilize their time differently than what we have planned for the day. But, at the end of the day, there is a lot of love between the providers and the patients. We create an everlasting bond with them that allows the patients to trust us and work well with us. I have gotten close with many patients I have worked with over the years and love working with them. Although they have Alzheimer's and it may impair their memories to an extent, I can always tell when a patient recognizes me and stops to talk with me. I love getting to care for older adults with Alzheimer's and the satisfaction that I get from my job is unmatched.

12. Based on your experiences in your career thus far, do you believe that occupational therapy creates an impact on the lives of Alzheimer's patients?

Definitely. I have worked with many patients that have a range of cognitive impairments and other comorbid disorders and I know that it creates an impact on them. Seeing their progress and improvement after sessions with me and the occupational therapist is what makes me love my job. Not only seeing their progress but seeing their happiness and pride in completing a task they have not been able to do in a long time is what my job is really about. Whether it is independently or with assistance, they are always proud of the progress they are making. Seeing their smiles after they complete a task is so rewarding for me and for them. I know that we create an impact on their lives and on their families as well.

Interview 2

1. What is your full name and title?

My name is Briana Hewitt, and I am a COTA and a MSOT student.

2. Is it okay if I use your name in my thesis paper? It has the potential to be seen by two occupational therapy professors and the honors students at Western Michigan University.

No thank you. Please change my name for the sake of privacy. You may still include my information.

3. For how long have you been an occupational therapist assistant?

I have worked as a COTA now for about 6 years but am currently working towards getting my master's degree in occupational therapy.

4. How long have you worked with older adults who have Alzheimer's?

I have worked with older adults with major neurocognitive disorders for about 4 years now. I have worked with people who have had dementia, Alzheimer's and those who have had memory impairments after accidents as well. My first experience was in a skilled nursing facility, but I was not working exclusively with memory impaired individuals. The majority of the patients that I was working with had other comorbidities along with dementia and Alzheimer's that required them to seek care outside of their home. Now, I work as a COTA in a lockdown dementia unit that is centered around memory and cognition as well as safety for the individual.

5. What is particularly difficult about working with people who have Alzheimer's?

For me, the most difficult aspect of treatment that I have run into so far has been centered around the other staff that I work with who may refuse to care for the patient

centered around their treatment plan. A large part of our job includes educating other staff members who will interact with that patient and the complacency of the staff members who may not know the patient well. Otherwise, the only issues that I have had with working with older adults who have cognitive impairments are stubbornness and the lack of understanding as to why treatment is beneficial.

6. Is it any different than working with a cognitively aware adult? Why?

Yes it is very different. I have worked with many different patients that have a range of disorders and diseases, but patients with Alzheimer's and related dementias sometimes do not have the capability to understand the educational aspect around treatment. When this happens, we find a way to explain it to them that makes sense on their terms. We do our best to educate the patient, but a lot of the education goes towards the caregivers and family members of the individual. Patients with dementia and Alzheimer's disease may need some extra motivation and reassurance as well. I tend to be more patient with patients who have memory impairments because I know that their lack of understanding is not anyone's fault. As providers we seek to provide comfort to the individual while also making sure that the therapeutic techniques are maintained for an optimal impact on the patient.

7. How do you provide comfort and reassurance to the caregivers and family members of the adults who have Alzheimer's?

I provide comfort to the caregivers and family members simply by including them. Family members like to be included in the treatment of their loved ones, especially if they are the ones who will be taking care of them in the future. I always include the family members if they are with us during treatment. A lot of the time the educational

aspect of treatment is more aimed at the family because the individual with Alzheimer's will not remember the strategies and techniques that we use during treatment, so we include other caregivers and family members so that they will be included in the care of their loved ones.

8. Have you ever prescribed any assistive devices to improve safety and functioning to individuals with Alzheimer's?

I have never prescribed any devices to patients, but I have recommended the usage of assistive technology. I recommended self-feeding technology for patients who have tremors so that they would be more able to feed themselves independently and with minimal assistance. I mostly recommend technology that I believe will help the individual to pursue their occupations more independently. I have recommended items such as higher seating options for individuals who are at a fall risk or may not be able to get up out of chairs on their own. I have provided education on technology such as shower chairs, Hoyer lifts and how to transfer individuals using one, a sit-to-stand chair, and other mobility related devices. In one instance I had a patient with Alzheimer's who was a very high fall risk but was still ambulatory. For that patient we ended up ordering a protective chin strap so that they did not damage their jaw if they fell. I have worked with a number of different devices and they have all made the lives of the patients who use them easier and more independent. There was a patient that I was working on mobility with that was confined to a wheelchair. The chair kept tipping over as the individual was reaching for things, so we decided to use a special tip-resistant bar for this patient so he would not tip his chair any longer. As we worked on lateral movements and reaching safely for items to the side of him, we

noticed that the tip bar we had installed on his wheelchair really worked and was able to allow him more independent movements. The technology has certainly made the lives of Alzheimer's patients more accessible, and the patients may be resistant to use the technology at first but are grateful when they can perform tasks with ease while using a device compared to before when they were struggling with a task.

9. What are some of the most effective strategies for working with people who have Alzheimer's disease?

One of the most effective strategies that I have used as a COTA and MSOT student would be the concept of redirection. Often times during treatment the patient will become distracted by something you said that reminded them of a past memory that they had, and it will take away from the therapeutic time we are spending with them. When individuals get distracted, I usually will redirect them to the task at hand while also entertaining their stories. Patients with Alzheimer's and related memory impairments love to talk about their lives and family members and sometimes we can even use the stories as a motivation for treatment. We do not lie to the patient and promise them things that we know will not happen, but we do use their stories as a motivator. For example sometimes I say, "tell me more about your family while we do this task", or other prompts like that that will keep the patient motivated to complete a task but will also fulfill their own personal demands at the time. Our main goal always as COTA's and OT's is always the patient's safety.

10. Have you ever experienced burnout as a COTA caring for someone with cognitive memory impairment?

I personally have never experienced burnout in my career, but I have seen family caregivers experience burnout while caring for their loved ones. As a professional I know that it is important to take care of myself and my health. Working with patients who have Alzheimer's and other memory impairments is definitely strenuous during the times I am caring for them and working to inform them on why therapy is needed for them and how it is important. It can be difficult to explain things several times and know that even after several explanations they may not fully understand.

11. How would you rate your job satisfaction when working with people who have Alzheimer's?

I would say that my job satisfaction is very high since I have started working with people with Alzheimer's disease. It is very different from working with individuals who aren't cognitively aware in the sense that it is more difficult to gain and keep their attention. However, I really love working with adults who have memory and cognition impairments, and it is what I see myself doing for the rest of my career after finishing OT school. It is extremely rewarding to see the progress that the individuals achieve over time from their starting points, and it makes me incredibly satisfied with my job.

12. Based on your experiences in your career thus far, do you believe that occupational therapy creates an impact on the lives of Alzheimer's patients?

Absolutely. I have seen the challenges that individuals have to overcome in their daily lives and how occupational therapy techniques and strategies help them to achieve their occupational goals. There is most definitely a difference in the quality of life in

the patients that I have worked with over periods of time. I love to see how they improve over time and the level of interaction that they become more comfortable with over time. I have seen occupational therapy change lives of the patients and the family members and caregivers as it puts them at ease to see their loved ones improving and doing things more independently than they were able to before interventions. I believe that the families of the Alzheimer's patients feel very grateful to be informed of techniques, technology, and assessments that we implement because it takes a great deal of weight off their shoulders. Being a caregiver is very tough for family members and can create a lot of tension between the family units. That being said, I really do believe that occupational therapy and the therapeutic strategies and interventions that we do for Alzheimer's patients creates a lasting impact on the lives of the patients and their families.

Conclusion

Occupational therapy has a large impact on patients with Alzheimer's in more ways than are evident to the unforeseen eye. The providers show compassion, patience, fortitude, and excitement towards working with older adults who have Alzheimer's to help them create a lasting bond between patient and provider. The occupational therapist's main goal for patients is to improve the occupational wellness and maximize independence safely, so encouraging patients to push themselves outside of their comfort zone is not atypical. Through the implementation of new strategies for safety and independence, implementing new technology, as well as following the individuals' occupational goals, occupational therapists create an impact on the patient and their families that will last a lifetime.

Resources

Akyurek, G. (2017, July 5). Assistive technology in occupational therapy. Retrieved April 24, 2021, from <https://cdn.intechopen.com/pdfs/55355.pdf>

Alzheimer's Disease Education & Referral Center. (n.d.). Alzheimer's Disease.

Brasure, Michelle, Desai, Priyanka, Davila, Heather, Nelson, Victoria A, Calvert, Collin,

Jutkowitz, Eric, . . . Kane, Robert L. (2018). Physical Activity Interventions in Preventing Cognitive Decline and Alzheimer-Type Dementia: A Systematic Review. *Annals of Internal Medicine*, 168(1), 30-38.

Brett Hauber, Ateesha F. Mohamed, F. Reed Johnson, Michael Cook, H. Michael Arrighi, Jing Zhang, & Michael Grundman. (2014). Understanding the relative importance of preserving functional abilities in Alzheimer's disease in the United States and Germany. *Quality of Life Research*, 23(6), 1813-1821.

Care Options. (2021). from <https://www.alz.org/help-support/caregiving/care-options>

Catherine Verrier Piersol, Lou Jensen, Deborah Lieberman, Marian Arbesman; Occupational Therapy Interventions for People With Alzheimer's Disease. *Am J Occup Ther* 2017;72(1):7201390010. <https://doi.org/10.5014/ajot.2018.721001>

Crowley, D. (2018, September 28). How occupational therapy can positively impact patients with dementia. Retrieved from <https://www.foxrehab.org/how-occupational-therapists-help-older-adult-patients-with-dementia/#:~:text=Occupational%20therapists%20can%20have%20a%20positive%20imp>

act%20on,disease.%20Helping%20those%20with%20dementia%20can%20be%20challenging.

Heerema, Esther M. (2020, June 21). Who was Alois Alzheimer and How WAS Alzheimer's Disease discovered? Retrieved March 30, 2021, from <https://www.verywellhealth.com/who-was-alois-alzheimer-how-was-alzheimers-disease-discovered-3858664>

Linda R. Struckmeyer, Noralyn Davel Pickens; Home Modifications for People With Alzheimer's Disease: A Scoping Review. *Am J Occup Ther* 2015;70(1):7001270020. <https://doi.org/10.5014/ajot.2015.016089>

Letts, Lori., Mary Edwards, Julie Berenyi, Kathy Moros, Colleen O'Neill, Colleen O'Toole, Colleen McGrath; Using Occupations to Improve Quality of Life, Health and Wellness, and Client and Caregiver Satisfaction for People With Alzheimer's Disease and Related Dementias. *Am J Occup Ther* 2011;65(5):497–504. <https://doi.org/10.5014/ajot.2011.002584>

Lou E. Jensen, René Padilla; Effectiveness of Interventions to Prevent Falls in People With Alzheimer's Disease and Related Dementias. *Am J Occup Ther* 2011;65(5):532–540. <https://doi.org/10.5014/ajot.2011.002626>

Nancy Robert Dooley, Jim Hinojosa; Improving Quality of Life for Persons With Alzheimer's Disease and Their Family Caregivers: Brief Occupational Therapy Intervention. *Am J Occup Ther* 2004;58(5):561–569. <https://doi.org/10.5014/ajot.58.5.561>

Occupational therapy practice: Framework: Domain & process, 3rd edition. (2014). AJOT:

American Journal of Occupational Therapy, 68(SI), S1

Occupational Therapy Services for Persons With Alzheimer's Disease and Other Dementias. *Am*

J Occup Ther 1994;48(11):1029–1031. <https://doi.org/10.5014/ajot.48.11.1029>

René Padilla: Effectiveness of Interventions Designed to Modify the Activity Demands of the

Occupations of Self-Care and Leisure for People With Alzheimer's Disease and Related

Dementias. *Am J Occup Ther* 2011;65(5):523–

531. <https://doi.org/10.5014/ajot.2011.002618>

Santulli, Robert B, Blandin, Kesstan, Robert B Santulli, MD, & Kesstan Blandin, Phd. (2015).

The Emotional Journey of the Alzheimer's Family. Dartmouth College Press.

Smallfield, S; Supporting Adults With Alzheimer's Disease and Related Major Neurocognitive

Disorders and Their Caregivers: Effective Occupational Therapy Interventions. *Am J*

Occup Ther 2017;71(5):7105170010. <https://doi.org/10.5014/ajot.2017.715002>

The Human Resource--occupational therapy. (1981). *American Journal of Occupational*

Therapy, 35(3), 203-203. doi:10.5014/ajot.35.3.203d

Williamson, J., Goldman, J., & Marder, K. S. (2009). Genetic aspects of Alzheimer disease. *The*

neurologist, 15(2), 80–86. <https://doi.org/10.1097/NRL.0b013e318187e76b>

What to know about the stages of Alzheimer's. (2019, April 19). from

<https://www.mayoclinic.org/diseases-conditions/alzheimers-disease/in-depth/alzheimers-stages/art-20048448>

What is AT? (n.d.). Retrieved March 24, 2021, from <https://www.atia.org/home/at-resources/what-is-at/>

What is Occupational Therapy? (2021.). Retrieved from <https://www.aota.org/About-Occupational-Therapy.asp>