

Bridge 4

Research Paper

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Topic: A bag, is it burden or my guardian?

I vividly remember last Christmas. I was invited to my cousin's sister's house in Virginia, and having a great time with her family. The appetizing chicken was being roasted inside of the oven, and I felt warmth while thinking about my family back home. After the scrumptious family dinner, I sat by the fireplace and watched my nephew unboxing his Christmas gift. I decided to call my mother before falling asleep under this cozy atmosphere. I lazily dialed the number, then waited to hear my mother's vigorous voice. I was appalled by the first sentence that came out from her mouth. "Your grandmother was hit by a car."

My grandmother was diagnosed with Alzheimer's disease three years ago. According to Wikipedia, Alzheimer's disease, also referred to simply as Alzheimer's, is a chronic neurodegenerative disease that usually starts slowly and gradually worsens over time.¹ As a grandson, it was heartbreaking to witness her vulnerability. Especially because she raised me until I was five instead of my busy parents who were always working. My mother continually gasped while she explained the accident to me. My parents were at Christmas mass when it happened. My sister stayed home with my grandmother to look after her. My grandmother soon got scared after failing to recognize my sister, who hadn't come home in such a long time. Her fear led her to think that she needed to go out and find my parents. When my sister

¹ "Alzheimer's Disease." Wikipedia. April 23, 2019. Accessed April 24, 2019. https://en.wikipedia.org/wiki/Alzheimer's_disease.

went to the bathroom, she walked out the front door by herself with her bag. I imagined how icy and slippery the road would have been after December's snow. It was probably the worst condition for my grandmother to walk properly. According to the witness, my grandmother kept trying to find something inside of her bag. She was crossing the crosswalk, then stopped when the light already turned red. She had to move quickly to other side of the sidewalk, but instead searched her bag at middle of the road. Fortunately, the driver detected my grandmother from distance and stopped his car right in front of her. However, she was enormously surprised by the car's roaring sound and tumbled on the slippery road. She was immediately sent to the nearest hospital and diagnosed with an injury which took six weeks to heal.

My mother bursted into tears while telling me all this story. We were all shocked how this happened all of sudden. The most upsetting and heartbreaking fact was that there was no one to blame. We were fully aware that my grandmother should never be left alone, but not prepared for the opposite situation. I thought if only she crossed the road a bit faster, her accident might not have happened. I started to think what kept my grandmother so long in middle of the road. It was her bag. The next morning, I called my mother again to send me a picture of my grandmother's bag. It was a square shaped shoulder bag with no compartments inside. Her belongings were rolling around at the bottom. It is difficult for Alzheimer's patients to see what they need inside, then pick it up in short time. I concluded that if her bag were designed to easily detect what is inside, then the accident would have been prevented. I could not help but wonder about my grandmother's disease, and investigated it more deeply.

I called the Alzheimer's Association in New Jersey, and asked them several questions about the disease. Mr. Lerner, a chief director, explained to me that the Alzheimer's disease

can be interpreted as a form of dementia.² According to their website, dementia is a general term for a decline in mental ability severe enough to interfere with daily life. Memory loss is an example, and Alzheimer's is the most common type of dementia. Treatment of dementia depends on its cause. In the case of most progressive dementias, including Alzheimer's disease, there is no cure and no treatment that slows or stops its progression.³ The fact that the disease is incurable hurt my feelings. I called my mother once again to ask more about my grandmother's symptoms. I told her if the bag were designed to be practical for my grandmother, than the accident would not have been occurred. My mother was aware of dementia, and refuted my theory. She stated that it is unnecessary for my grandmother to carry a bag when she already lost most of her memories. I understood what she was saying, however, my grandmother still needs to carry something to guide her. My thesis seemed to be clear. "Do Alzheimer patients need a bag?" Also, I am exploring factors that hinder Alzheimer patients to live normal lives. Moreover, asking myself why they would need special, purposeful garments to live better lives.

There are several reasons why Alzheimer's patients need to carry bags. My biggest concern is their sudden disappearance. There is a high possibility that they get lost and wander around due to their memory loss. Mayo Clinic's website states that Alzheimer's easily causes disorientation, which can lead to wandering.⁴ It is crucial for caregivers, like our family members, to understand wandering and how to address it. There are many reasons why a person who has Alzheimer's might wander. First is stress or fear. Your loved one might wander as a reaction to an unfamiliar or over-stimulating environment, a loud noise or a

² Verbal Interview with Mr.Lerner

³ "What Is Dementia?" Alzheimer's Disease and Dementia. Accessed April 24, 2019. <https://www.alz.org/alzheimers-dementia/what-is-dementia>.

⁴ "Alzheimer's: Understand Wandering and How to Address It." Mayo Clinic. July 12, 2018. Accessed April 24, 2019.

situation he or she doesn't understand. Second is searching. He or she might get lost while searching for someone or something. Third is boredom. He or she might be looking for something to do. Forth is basic need. He or she might be looking for a bathroom or food, or want to go outdoors. Last but not least, following past routines. He or she might try to go to work, do chores, or buy groceries. I strongly agree with these reasons because my grandmother ran away from home to search my parents. There is one possible and effective way to keep the person with Alzheimer's safe.⁵ We all know that it is not always possible to prevent wandering, but using a GPS device can greatly help us. Consider having your loved one wear a GPS or other tracking device that can send electronic alerts about his or her location. If your loved one wanders, the GPS device can help you find him or her quickly. To put this theory into practice, my grandmother needs an effective garment where she can keep her GPS device. That garment simply could be a bag.

Moreover, she needs more than just GPS device when she leaves the house. Of course, my family members will pay attention to her more than ever. They would probably want her to carry crucial items that can help her in emergencies. Objects such as cell phone, wallet, and notebook with home address written can be greatly helpful when she get lost. Even though she cannot remember how to use those things, pedestrians and police officers can do it for her. My concern is that her muscles are too weak now to carry all those items individually. Alzheimer's disease is known for the knockout blow it delivers to memory and other cognitive functions. However, this disease of the brain may also be linked to muscle weakness, according to a study published today in the Archives of Neurology.⁶ Furthermore, it has scientifically proven that individuals with Alzheimer's disease may lose muscle mass.

⁵ "Alzheimer's: Understand Wandering and How to Address It." Mayo Clinic. July 12, 2018. Accessed April 24, 2019.

⁶ "Alzheimer's Disease Linked to Weaker Muscles." U.S. News & World Report. Accessed April 24, 2019.

According to JAMA and Archives Journals, lean mass -- the weight of an individual's bones, muscles and organs without body fat -- appears to decline among patients with Alzheimer's disease, according to a new report. These decreases may be associated with declines in brain volume and function.⁷ In addition, unintended weight loss often occurs among individuals with Alzheimer's disease and frequently begins prior to memory loss or other cognitive symptoms, according to background information in the article. This weight loss is associated with the severity of dementia and with faster progression of Alzheimer's disease.⁸

U.S. News further reported that Alzheimer's Disease is linked to weaker muscles. Among the 900 older adults in the study, those who were initially stronger had a smaller chance of getting Alzheimer's in the future. (The average follow-up time was 3.6 years.) The study found that muscle strength was also tied to a lower risk of developing mild cognitive impairment, the precursor to Alzheimer's disease.⁹ Therefore, Alzheimer's patients should carry a light bag where they can keep all their belongings together. When their items are securely placed at one bag, their uncomfortable hands are free to carrying them one by one. All my grandmother would need to do is simply place the bag's shoulder strap on her torso, which can evenly handle the weight. Her weakened hand and arm muscles will be exempt from tedious labor.

Not just because a bag can practically help my grandmother, I wish it could bring her peace and comfort as well. My mother informed me that my grandmother gradually shows

⁷ "Incorrect Authors Name In: The JAMA Network Journals: New Names for the Archives Journals." *Jama* 308, no. 9 (2012): 863. doi:10.1001/jama.2012.10086.

⁸ "Incorrect Authors Name In: The JAMA Network Journals: New Names for the Archives Journals." *Jama* 308, no. 9 (2012): 863. doi:10.1001/jama.2012.10086.

⁹ "Alzheimer's Disease Linked to Weaker Muscles." U.S. News & World Report. Accessed April 24, 2019.

<https://health.usnews.com/health-news/blogs/on-fitness/2009/11/09/alzheimers-disease-linked-to-weaker-muscles>.

anxiety through her fidgety hands. Her notable signs include pulling or rubbing at clothes or bedding, rubbing hands together, twisting fingers, wringing hands, and generally keeping hands in motion. According to Daily Caring, sensory therapy or fidget toys are an effective way to reduce anxiety, calm nerves, and provide comfort. These are simple touch-based activities that help someone with Alzheimer's keep hands busy in safe, soothing ways.¹⁰ If my grandmother feels better after touching something fluffy, her bag made out of soft fabric would definitely help her. According to the Best Alzheimer's Products, tactile stimulation is crucial for Alzheimer's and dementia. It can be easily described as to touch and be touched. Tactile Stimulation is anything that can be touched or anything that touches us. Every solid object has texture, temperature, shape. For instance, balls in a collection can be smooth or rough, hard or soft, furry or not. The sense of touch also includes the differentiation and recognition of temperature, pain, and body position (proprioception). The list of things we can use to provide tactile stimulation for people with Alzheimer's is almost endless. Any "thing," any object in our world can be touched, within limits.¹¹ Providing appropriate sensory stimulation for Alzheimer's disease and other forms of dementia has been shown in studies to decrease agitation and restlessness, as well as improve sleep. These symptoms are very common in most forms of dementia, and certainly in people with Alzheimer's, so sensory stimulation translates into improved quality of life for everyone in a care partnership.

¹⁰ "Alzheimer's Disease Linked to Weaker Muscles." U.S. News & World Report. Accessed April 24, 2019.
<https://health.usnews.com/health-news/blogs/on-fitness/2009/11/09/alzheimers-disease-linked-to-weaker-muscles>.

¹¹ "Alzheimer's Disease Linked to Weaker Muscles." U.S. News & World Report. Accessed April 24, 2019.
<https://health.usnews.com/health-news/blogs/on-fitness/2009/11/09/alzheimers-disease-linked-to-weaker-muscles>.

More recent investigations indicate that appropriate sensory stimulation can actually repair the brain and make it grow.¹²

Based on how sensory stimulation evokes the Alzheimer's patients, a bag that has interesting texture can effectively ease my grandmother's anxiety. Not only could it help keep her brain working, but also create a deep attachment between the two of them. More precisely, toys can obtain the interest of the person with Alzheimer's. Almost any toy that the person with Alzheimer's is interested in will be beneficial. The great thing about toys is that they pull us into the moment. Once we get involved with a toy, our full attention is taken up with play and exploration. A knitted bag can actually be a toy to my grandmother who loves to touch fluffy things. Not merely a container to store her belongings, she can carry it at all time to comfort and amuse herself.

Then, exactly what kind of bag does my grandmother need? I would say a bag that is light and easy to carry. A shoulder strap should be attached to her body that can evenly handle the weight when she wears it. The inside should be organized with separate compartments, so that she can easily store and relocate her belongings. The texture of the bag should be soft, so she can feel comfortable whenever touching it.

After my grandmother's accident, I was deeply engaged with the elders who are going through health problems. In particular, Alzheimer's patients. I wanted to design a practical product that can make their lives better. They need a practical item. As their disease advances, they are unable to care for themselves and experience behavioural issues. Gradually, their bodily functions are lost, ultimately leading to death. For them to communicate with their families and society, they must carry a cellular phone, wallet, and note book with their

¹² "Alzheimer's Disease Linked to Weaker Muscles." U.S. News & World Report. Accessed April 24, 2019. <https://health.usnews.com/health-news/blogs/on-fitness/2009/11/09/alzheimers-disease-linked-to-weaker-muscles>.

information on. Therefore, they need a certain type of garments to keep their belongings.

What I have come up with is a bag. A bag that can keep my grandmother safe and make her happy.

Sources

1. "Alzheimer's Disease." Wikipedia. April 23, 2019. Accessed April 24, 2019. https://en.wikipedia.org/wiki/Alzheimer's_disease.
2. Verbal Interview with Mr.Lerner
3. "What Is Dementia?" Alzheimer's Disease and Dementia. Accessed April 24, 2019. <https://www.alz.org/alzheimers-dementia/what-is-dementia>.
4. "Alzheimer's: Understand Wandering and How to Address It." Mayo Clinic. July 12, 2018. Accessed April 24, 2019.
5. "Alzheimer's: Understand Wandering and How to Address It." Mayo Clinic. July 12, 2018. Accessed April 24, 2019.
6. "Alzheimer's Disease Linked to Weaker Muscles." U.S. News & World Report. Accessed April 24, 2019.
7. "Incorrect Authors Name In: The JAMA Network Journals: New Names for the Archives Journals." *Jama* 308, no. 9 (2012): 863. doi:10.1001/jama.2012.10086.
8. "Incorrect Authors Name In: The JAMA Network Journals: New Names for the Archives Journals." *Jama* 308, no. 9 (2012): 863. doi:10.1001/jama.2012.10086.
9. "Alzheimer's Disease Linked to Weaker Muscles." U.S. News & World Report. Accessed April 24, 2019. <https://health.usnews.com/health-news/blogs/on-fitness/2009/11/09/alzheimers-disease-linked-to-weaker-muscles>.
10. "Alzheimer's Disease Linked to Weaker Muscles." U.S. News & World Report. Accessed April 24, 2019. <https://health.usnews.com/health-news/blogs/on-fitness/2009/11/09/alzheimers-disease-linked-to-weaker-muscles>.
11. Alzheimer's Disease Linked to Weaker Muscles." U.S. News & World Report. Accessed April 24, 2019. <https://health.usnews.com/health-news/blogs/on-fitness/2009/11/09/alzheimers-disease-linked-to-weaker-muscles>.
12. "Alzheimer's Disease Linked to Weaker Muscles." U.S. News & World Report. Accessed April 24, 2019. <https://health.usnews.com/health-news/blogs/on-fitness/2009/11/09/alzheimers-disease-linked-to-weaker-muscles>.