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Most people assume that memory loss is usually associated with Alzheimer’s and that those afflicted with the disease suddenly begin to lose their memory. However, that isn’t entirely true. People suffering from Alzheimer’s retain most of their older memories but rather have a harder time processing new information. Moreover, it’s important to understand that with no cure presently available, those stricken by the disease do lose even the most engrained memories over time (Hughes). As the development of Alzheimer’s, known to be a growing concern worldwide, remains ever more prominent with mental and physical side effects, the search to find a cure continues.

The beginning signs of Alzheimer’s disease involve memory problems and cognitive impairment. Interestingly enough, some people with memory problems aren’t necessarily victims of Alzheimer’s but rather a condition called, “mild cognitive impairment” (MCI) (“Alzheimer’s Disease-Get the facts”). People affected with mild cognitive impairment are typically those who suffer with more memory problems than normal for their age. Young people with MCI do not usually suffer from general symptoms that interfere with their everyday life (“Alzheimer’s Disease-Get the Facts”). It’s important to note that an older individual with MCI is at a greater risk of developing Alzheimer’s, but that’s not to say all eventually do (“Alzheimer’s Disease-Get the Facts”). Alzheimer’s disease typically begins rather mildly, but gradually gets worse with time. For the most part, early symptoms are commonly associated with memory lapses - more specifically, short-term memory loss. The long-term memory of the patient suffering with Alzheimer’s is usually unaffected during early stages (“What is Alzheimer’s Disease?” 1).

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In addition, early-onset Alzheimer’s attacks younger people usually under 65 years of age and is a rare form of dementia. “Of all the people who have Alzheimer’s disease, about 5 percent develop symptoms before age 65. That means if 4 million people have Alzheimer’s, 200,000 of them already have an early-onset form of Alzheimer’s” (“Early-onset Alzheimer’s: When Symptoms Begin before Age 65” 1).

In contrast, the late-onset form of Alzheimer’s is associated with people in their mid-60’s. Apo lipoprotein E, also referred to as APOE, is a gene involved in late-onset Alzheimer’s. This specific gene carries multiple forms. Among them, is APOE e4, which increases a person’s risk of developing the disease at an earlier age (“Alzheimer’s Disease-Get the Facts”). It’s still an ongoing mystery as to why Alzheimer’s targets older adults.

Life expectancy of a person suffering with Alzheimer’s is around eight to ten years. However, every case is different depending on age, gender, weight and time of diagnosis. A person diagnosed at the age 80 for example, usually receives a life expectancy of as little as three to four years (“Alzheimer’s Disease-Get the Facts” 2).

As well, currently, three stages of Alzheimer’s have been identified. As the disease progresses and matures, people tend to experience greater memory loss and other cognitive difficulties; such as wandering and getting lost, trouble counting money, paying bills and repeating questions. Daily tasks become longer to complete. Personality and behavior change ever so slightly but tends to worsen over time. Patients are usually diagnosed at this stage (“Alzheimer’s Disease-Get the Facts”).

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The second stage is known as the moderate stage. Damage often happens in areas of the brain that control language, sensory processing, reasoning and conscious thought. Confusion and

memory loss worsen, while recognizing friends and family can become problematic, as well. The ability to learn and carry out multistep tasks such as getting dressed remains near impossible to fulfill alone. Hallucinations, delusions and paranoia are also all part of a moderate case of Alzheimer’s (“Alzheimer’s Disease-Get the Facts”).

Lastly, the final stage of Alzheimer’s shows clear signals of the body shutting down. Brain tissues begin to shrink as plaques and tangles spread significantly throughout the brain. You may find that a person suffering with a case of severe Alzheimer’s cannot communicate and is completely dependent on others for survival (“Alzheimer’s Disease-Get the Facts”).

So, there are two features that distinctively identify Alzheimer’s disease, and those are known as plaques and tangles:

These plaques are largely made of protein called ‘beta amyloid,’ or A-Beta. When A-Beta molecules accumulate and stick together, it is toxic to brain cells. Tangles inside nerve cell, these fibrous clumps interfere with vital processes eventually choking off the living cells. As well, when brain cells degenerate and die, the brain markedly shrinks in some regions. (“What is Alzheimer’s Disease?”)

The part of the brain that this occurs is in the hippocampus, which is absolutely crucial for forming our memories. The dying off of neurons causes parts of the brain to become affected, causing widespread damage (“Alzheimer’s Disease-Get the Facts” 1).

While robbing a person of memories, Alzheimer’s disease can even affect people physically. By hindering coordination, mobility and not being able to perform daily tasks or

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exercise, the result can eventually lead to a decline in physical aptitude (“What is Alzheimer’s Disease?”). A person with Alzheimer’s may experience difficulty swallowing solid foods, which

in turn can lead to unhealthy weight loss. Normal bodily functions, such as breathing, can also become increasingly difficult as well. “In one study, people who walked slowly and had poor balance were more likely to be diagnosed with Alzheimer’s disease in the following 6 years” (“What Alzheimer’s Does to Your Body.” 1).

Moreover, the area of the brain that’s commonly targeted by Alzheimer’s, the hippocampus, also deals with emotional maturity. Tampering with this part of the brain, causes

the person affected to overreact to certain situations and vice-versa. It also explains the reason of child-like behavior being displayed by those affected with Alzheimer’s (Hughes).

The disease can typically affect every aspect of our daily lives. One major concern is how it affects employment. Due to having a more difficult time acquiring new information, it comes to no surprise that Alzheimer’s can impact employment and just make finding a job ever more challenging. Equally important, Alzheimer’s can even affect current employment - even if the job has become second nature – by making what was once an easy task, confusing and overwhelming (Hughes).

Another life complication is rather a simple one that we all eventually become accustomed to – paying bills. Imagine having the lights of your apartment shut off abruptly, without an understanding why, creating mass confusion. The simplicity of paying bills on time can be overly difficult for a person suffering with a moderate case of Alzheimer’s disease (Hughes).

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Degradation of the brain can also result in trouble communicating. Depending on precisely where the plaque builds and tangles have developed, loss of motor skills becomes a real

possibility as well. Communicating with someone who suffers from Alzheimer’s can be frustrating to say the least. Those affected by the disease tend to frequently interrupt others and

usually have a difficult time maintaining a singular thought. Patience is of utmost importance when dealing with a person at this stage of the disease.

In response to preventing Alzheimer’s from ever occurring or downright slowing it down in its tracks, stimulating the mind can aid in this task. Crossword puzzles, Sudoku and digital games can help with preventing Alzheimer’s as well as keeping us entertained. Modern style

video games have evolved immensely over the years, making them an excellent stimulating habit that benefits those prone to developing Alzheimer’s. Playing certain game genres that require multiple mental processes, such as strategy and role-playing, is a fantastic way to prevent Alzheimer’s. It’s best to start young and early for a higher chance to reduce the risk of developing Alzheimer’s (Roberts).

In addition, certain foods can help to reduce the risk and slow down the progression of Alzheimer’s as well. Fish is among one of those foods. The Docosahexaenoic acid (DHA) contained in fish is one of three forms of Omega-3 fatty acids that are the cause of prevention (Roberts). Certain drinks, like juice and coffee, are rumored to help fight against Alzheimer’s disease. Scientists believe the effect is due to the vitamins and antioxidants contained within juice and coffee that aids with prevention (Roberts). Moreover, keeping a healthy body mass index (BMI) can also reduce the risk of Alzheimer’s. A good physical form usually translates in a healthy brain (Roberts).

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When these efforts are not successful, the current medicine of today cannot cure Alzheimer’s due to the complexity of the disease; however, medication can certainly help lessen

or even stabilize the symptoms (“Medications for Memory Loss”). At moderate stages of Azlheimer’s, patients are often prescribed digestible drugs, such as Donepezil, Rivastigimine or Galantamine. These specific, medically approved drugs may help with memory problems and concentration (“What is Alzheimer’s Disease?” 4). Those with moderate to severe stages of Alzheimer’s, however, are recommended a drug called Memantine. Memantine can help with mental abilities as well as coping with difficult behaviors (e.g. agitation, delusions…) (“What is Alzheimer’s Disease?” 4)

Researchers are looking beyond treating simple symptoms to actually following-up underlying disease processes. Scientists are currently performing tests on several possible interventions. These include immunization therapy, cognitive training, drug therapies, physical activity and treatments used for cardiovascular disease (“Alzheimer’s-Get the Facts”). As it stands, there is currently no cure available for Alzheimer’s; however, with an early diagnosis,

preventing Alzheimer’s from escalating may very well be the best chance we have at overcoming this crippling disease.

In conclusion, Alzheimer’s is a common disease that affects millions of lives every year. Whether suffering from a mild or moderate case of Alzheimer’s, this disease can affect almost every aspect of daily life. While prevention, unfortunately, remains the best possible solution available at this current time, the search to find a cure continues.