Alzheimer's Disease and Related Dementias

The word "dementia" refers to symptoms found in people who have cognitive problems. This is a result of losing brain cells. Although losing brain cells is part of the aging process, illnesses related to dementia of any kind occurs at a faster rate. The result is impaired thought processes (Alzheimer-Europe. Undated).

There are many types of dementia, 84 in all. Some dementias are the result of another illness, such as AIDS. It is known that HIV and AIDS has a direct effect on the brain and cognitive impairment. Between eight and sixteen per cent of AIDS patients develop a progressive type of dementia. Persons with HIV usually develop dementia in the end stages of their disease. Some symptoms of dementia may surface earlier. Symptoms include: confusion, difficulty, apathy, blunted emotions, and loss of inhibitions. Victims of AIDS however, appear to maintain most of their original behaviors until death occurs.

Years of heavy drinking can result in a form of dementia. Sometimes, however, when the person stops drinking and begins to eat a balanced diet, improvements in cognition may occur. Year of heavy drinking can also cause Korsakoff's syndrome, which involves extensive memory loss. Korsakoff's Syndrome is not actually a form of dementia; its symptoms are similar to those of dementia (Alzheimer-Europe. Undated).

Crutzfeldt-Jacob Disease (CJD) usually occurs by accident during surgery, although in very few cases, it can be hereditary. There is currently a controversy over whether or not beef infected with bovine spongiform encephalopathy is responsible for CJD in humans. Studies recently have shown younger people, the average is twenty-six, showing symptoms of Alzheimer's Disease. CJD progresses at a fast rate and most victims die within six months of being diagnosed. Some live for two to five years. Symptoms include: mood swings, withdrawal from activities once enjoyed, memory problems, difficulty conversing, and jerky uncontrollable movements (Alzheimer-Europe. Undated).

Diffuse Lewy Body Disease is a type of dementia linked to Parkinson's Disease. It also affects one-fifty to one-fourth of people with Alzheimer's Disease. This type of dementia is fairly mild. Symptoms include: depression, confusion, and delusions. Also, persons with Lewy Body Disease appear to be more sensitive to medications related to behavior problems.

A large percent of persons with Down's Syndrome, who live to the age of forty or over develop Alzheimer's Disease. This population develops Alzheimer's Disease thirty to forty years earlier than the overall population (Alzheimer-Europe. Undated).

Gerstmann-Straussler-Scheinker Syndrome is a disease usually inherited. Symptoms include memory problems, slight involuntary movements, depression, and irrational behavior (Alzheimer-Europe. Undated).

Multi-Infarct Dementia (MID) is caused by small strokes which affect the blood supply to the brain. Areas of the brain generally affected include: memory, speech, language, and learning. Speech and behavior problems develop over time. Seizures and limb paralysis are common (Alzheimer-Europe. Undated).

Parkinson's Disease includes problems with ambulation, writing, and dressing. This is a result of the loss of a neurotransmitter called dopamine. Dopamine helps to control movement. Twenty to thirty per cent of persons with Parkinson's Disease develop dementia in the latter stages(Alzheimer-Europe. Undated).

Frontal lobe Dementia causes behavior problems with include: personality changes. Pick's Disease is just one type of frontal lobe dementia. People with this type of dementia tend to rude and arrogant. The onset of Pick's Disease is between fifty-two and fifty-seven. The average duration is six to seven years (Alzheimer-Europe. Undated).

Risk Factors

Alzheimer's Disease has been called "the disease of the century". Over four million people in the United States are afflicted with it, most of them are over sixty-five. Research shows that there are risk factors although the disease cannot be traced to one, single cause, it is a combination of situations which change from one person to another (Hamdy et al., 1998).

Age is one risk factor. The risk for people over 65 years of age is one person in 20. The risk is people under 65 years is one in one thousand. Many people become forgetful as they age, but the majority of people over eighty stay mentally alert. The chance of developing Alzheimer's Disease increases with age, but old age in itself does not cause Alzheimer's Disease. Problems with arteriosclerosis, can be a contributing factor in the development of Alzheimer's Disease. As people are living longer now, it is a perceived fact that Alzheimer's Disease and other dementias will increase. Head injury is another risk factor. Fifty per cent of persons who have some form of head injury may develop Alzheimer's Disease. Genetics is another risk factor, it does not mean that if one of your parents has Alzheimer's Disease that you will automatically get the disease, but the risk does increase (Alzheimer-Europe. Undated).

Some studies suggest that more women are diagnosed with Alzheimer's Disease than men. However, women live longer than men. If men lived as long as women do, the number of men diagnosed with Alzheimer's Disease would be about the same (Alzheimer-Europe. Undated).

There is no conclusive evidence that one group of people are at greater risk for developing Alzheimer's Disease. There is growing evidence, however, which shows that

people with a higher level of education are at lower risk for developing Alzheimer's Disease than those people with a lower level of education (Alzheimer-Europe. Undated).

Diagnosis of Alzheimer's Disease

Autopsy remains the only true diagnosis of Alzheimer's Disease, there have been advances in diagnosis by scanning the brain. One test, the Positron Emission Tomography (PET) , scan can detect brain abnormalities. (Time Magazine,1995).

Although Alzheimer's Disease was first discovered in 1906 by Alois Alzheimer in Germany, senile dementia was first recorded in Greece in 600 B.C. A lawgiver known only as one of the seven wise men stated that judgment is compromised in old age. Alzheimer's Disease was known as senile dementia until this point in time. Plato recognized senile dementia and stated that certain crimes were excusable in extreme old age. Although dementia was often associated with old age, the Greeks recognized that is was not part of normal aging. Hippocrates felt that senile dementia was part of the aging process. About 160 A.D., "morosis" (dementia) was added to the list of mental disorders and included old age as the time in which dementia occurs.

In 1599, DuLaurens, a physician to Henry IV of France stated that, as the body grow old and weak, memories are lost and becomes similar to the mind of a child. As late as the nineteenth century, senile dementia was considered to be inevitable with age. People with senile dementia were placed in asylums until death occurred (Hamdy et al., 1998).

In 1906, Alois Alzheimer presented a case of a woman of fifty-five years suffering with dementia. This case was unique because of her age. Senile dementia was thought to commence at sixty-five or older. The woman died within four years. An autopsy was performed which showed "multiple foci", known as plaques as well as thick, coiled fibers, known as tangles (Hamdy et al., 1998).

In 1978, Charles Wells published an article which told of autopsy findings. In his book, Wells states that the autopsy findings of persons with Alzheimer's Disease and senile dementia to be identical (Hamdy et al., 1998).

Types of Memory Loss

Memory loss is one of the first noticeable problems which occurs with the onset of Alzheimer's Disease. Memory loss can lead to communication, safety, and behavior problems. There are three different types of memory which can be affected (Alzheimer-Europe. Undated).

Episodic memory is the memory which people have of events which have occurred in their lives, ranging from the most significant to the most ordinary. Within episodic memory are short-term and long-term memory. Short-term memory is what has happened in the last hour. Long-term memory is events which happened over an hour ago. In the beginning stages of Alzheimer's Disease, people have no difficulty remembering long

past but cannot remember what happened an hour ago. Memories of distant past events may sometimes interfere with present behavior . (Alzheimer-Europe. Undated). For instance, some people with Alzheimer's Disease may wake up in the night afraid and asking for their mother. They need to be comforted and reassured (Sirois, 1998).

Semantic memory covers the part of memory of word meanings. Some people, as the disease of Alzheimer's progresses, lose the ability to use words in proper context or become able to state the appropriate word and begin to point to an item (Alzheimer-Europe. Undated).

Procedural memory is the ability to know and carry out actions such as, playing cards, checkers and activities of daily living, such as dressing, washing, and cooking.

Communication becomes compromised as Alzheimer's Disease progresses. Afflicted people have difficulty expressing and understanding language. This in itself can cause problems because when people are unable to state their wishes and needs, those wishes and/or needs cannot be appropriately carried out (Alzheimer-Europe. Undated).

Stages of Alzheimer's Disease

Alzheimer's Disease is usually divided into three stages. People with Alzheimer's Disease can go back and forth through the stages and have symptoms of each of them (Alzheimer's Association, 1997).

Stage One places an emphasis on memory loss. Forgetting names and telephone numbers is very common during early stages. Loved ones may downplay or deny the importance of these events. The afflicted person may begin to exhibit difficulty with attention and will search for the "right" words. During this stage the person may become disoriented in places which were once familiar to them. They may develop problems with money, paying for the same service once or not at all. They begin to develop problems with the abstract. They become unable to draw a picture of a cube on a piece of paper, even though there is one drawn for them, they only need to reproduce it (Alzheimer-Europe. Undated).

Stage Two of Alzheimer's Disease sees an increased severity of problems. The person may have to leave their job and/or stop driving. Memory problems increase and distant memories remain intact. During this stage, because of increased memory loss, the person with Alzheimer's Disease may forget that people have visited them and complain that no one comes to visit. Loss of appetite can occur. This related to the person's inability to distinguish smells and tastes. Insomnia may begin as well as the inability to distinguish day from night. Person with Alzheimer's Disease may appear selfish and refuse help as their ability to carry out everyday chores begins to decline. They may become agitated, exhibit aggression, and pace for hours. Repetition of the same words and phrases is common during this stage (Alzheimer-Europe. Undated).

During Stage Three, cognitive functions have almost disappeared. Incontinence becomes prevalent. The inability of walk, sit, or swallow has greatly diminished or disappeared. Despite the severity of Stage three, the person with Alzheimer's Disease still responds to touch and familiar, soft voices (Alzheimer-Europe. Undated).

The Alzheimer's Association

The Alzheimer's Association provides support and assistance to families and victims of Alzheimer's Disease. The Alzheimer's Association has chapters worldwide. They have support groups where families can gather to express their concerns or just to get away for awhile. The Alzheimer's Association has been instrumental in lifting the stigma placed on people with Alzheimer's Disease. This association focuses on Alzheimer's Disease as a disease, not something which can be controlled. The Alzheimer's Association has developed the "Alzheimer's Project", where for a small fee, family members can get away for a day or a week-end. Trained persons will care for their loved ones to offer the primary caregivers a much needed respite (Alzheimer's Association. 1997).

The Alzheimer's Association is instrumental in researching both preventions and cures for Alzheimer's Disease and related dementias. The association is also an educator and provides much needed updates to people who care for victims of Alzheimer's Disease and related dementias. (Alzheimer's Association. 1997).

Services Offered

Although rural areas are more limited than urban areas for services offered, there are services available. In rural areas, neighbors and friends often help the primary caregiver by offering their services so the caregiver can have sometime away from the often stressful situation. (Hagan, April 1998).

The Right to Know

More and more people are being informed of their diagnosis of dementia or Alzheimer's Disease. Sometimes, however, the afflicted person is in denial and refuses to believe that there is a problem. Some people feel depressed just knowing that there is something wrong and are better off now knowing (Alzheimer Test Dilemma, 1995).

Whether to tell or not to tell a person he or she has Alzheimer's Disease is an individual decision. It should be made collectively by the doctor and the whole family. Some people afflicted with Alzheimer's Disease tell their doctor that they do not want their family to know. In time, however, the family knows that their is a problem (Alzheimer-Europe, Undated).

When a person has Alzheimer's Disease and has an understanding of the disease and what the diagnosis will encompass, the knowledge empowers them to make decisions, and take an active role in their plan of care. They can make decisions about finances and even perhaps participate in research which may benefit others. The afflicted person can even

make decisions about placement in a facility when the disease progresses (Alzheimer-Europe, Undated).

Letting the person with Alzheimer's Disease make decisions and allowing him or her choices is important. During the early stages of Alzheimer's Disease, the person can choose living arrangements and many more things. As the disease progresses, his or her ability to make decisions will diminish but the need to feel in control will stay intact. Making small decisions such as, deciding to drink coffee instead or tea is very important to the person. Feeling that the person has a choice will make the person feel like a person (Hagan, April, 1998).

Facility Placement

Overall, nursing homes in the United States are viewed very negatively. Social isolation is one of the biggest complaints regarding nursing home placement. Placing a loved one in a facility is a difficult decision for a family member. Like any other decision, there are pros and cons to facility placement. As the disease progresses, the stress on the caregiver becomes enormous and if there is only one primary caregiver, the caregiver's health and well-being can become an issue as well (Sirois, April, 1998).

There are advantages to placement of the person with Alzheimer's Disease or a related dementia. There are now special care units, specifically designed for the person with Alzheimer's Disease. These units are designed for the wandering resident, they are structured using the social model, and activities take place throughout the day. Medical needs are met at all times, but these special care units are designed to meet the needs of the Alzheimer/dementia resident. They appear more homelike, with circular walking paths and several common areas, as opposed to the traditional nursing facility which has long hallways, not very conducive to the wandering resident. Socialization is prevalent in these units which is very important to the Alzheimer/dementia population (Hamdy et al., 1998).

Another advantage to special care units are they are frequently secured units. Most residents brought to these units have issues of safety. They wander and make poor decisions because of cognitive problems (Hamdy et al., 1998).

Disadvantages to the special care units are they tend to keep the same staff and close relationships develop with the residents and with family members as well. While this can be an advantage, becoming too close to residents and their families can cause problems regarding objectivity (Hamdy et al., 1998). Advantages of placement are the caregiver is able to rest when needed, is able to visit their loved one, the caregiver is able to get on with his or her life knowing that the loved one is being care for and is safe.

Disadvantages of placement are often feelings of anger, loss of control, and guilt. Caregivers may feel angry because they feel they failed in caring for their loved one. They may feel guilty that they placed someone they love in a facility, and after being in control of the situation for so long, they may feel a "letdown" (Sirois, April, 1998).

One family member who placed his mother in a special care unit for Alzheimer's Disease said he knew it was just a matter of time before he needed to place his mother. He cared for his mother at home for seven years. The stove needed to be turned off because of safety issues and she needed supervision twenty-four hours a day. He knew then that this was the time for placement. This former caregiver said he knows he made the right decision. His mother adjusted very well and has established a routine of her own. She appears content and her favorite activity is visiting with her son, whom she still recognizes. (Prentiss, 1998).

Choices

Letting the person with Alzheimer's Disease make decisions and allowing him or her choices is important. During the early stages of Alzheimer's Disease, the person can choose living arrangements and many more things. As the disease progresses, his or her ability to make decisions will diminish. The need to feel in control will stay intact. Making small decisions such as, deciding to drink coffee instead of tea, is very important to the person. A person will always feel more like a person when he or she is allowed to have choices. (Hagan, April, 1998).

Medications Which Slow Down the Disease

Although there is no cure for Alzheimer's Disease, there are currently medications available which slow the disease progression. The two most commonly used are Aricept and Cognex. Cognex was the first medication approved in the United States to treat mild to moderate symptoms of Alzheimer's Disease. Early studies in 1986 reported marked improvement in cognitive status. It is important when subscribing this medication to start with small doses and increase the dose after four to six weeks. As with any medication, there can be side effects. Patients on Cognex must have weekly blood tests for eighteen weeks, then every three months after that. This medication can cause liver damage, nausea, vomiting, diarrhea, and decreased appetitite. Only one-third of patients on this medication show improvement, others will cognitively stay about the same. When the medication is discontinued, symptoms of Alzheimer's Disease will worsen. The cost, including blood tests, doctor visits, and the medication amounts to $2500-$3000 per year. (Hamdy et al., 1998).

In November 1996, Aricept became available. Taking this drug does not require having periodic blood tests. This medication should also be started with a small dose. Studies show that patients with mild to moderate symptoms of Alzheimer's Disease may exhibit cognitive improvement for up to two years while taking the medication. There are no studies available beyond this. Side effects are nausea, diarrhea, insomnia, vomiting, muscle cramps, fatigue, and anorexia. This drug also causes problems for patients who have stomach ulcers. (Hamdy, et al., 1998).

Although these most common medications slow or stop the progression of Alzheimer's Disease for a time, neither drug can change the inevitable progression of Alzheimer's Disease. (Hamdy et al., 1998).

Medication and Difficult Behaviors

There are many medications available to manage behavior problems which often accompany people with Alzheimer's Disease or a related dementia. Aggression, restlessness, delusions, hallucinations, and inappropriatesexual behavior are often treated with antipsychotic drugs. The most commonly used, with the least side effects are clozapine, risperdone, and olanzepine. Clozapine requires weekly blood tests. Possible side effects are dry mouth, constipation, orthostatic hypotension, tremors, restlessness, muscle cramps, seizures, and photosensitivity. (Hamdy et al., 1998).

Anxiety and insomnia is common with people with Alzheimer's Disease. Benzodiazepines work well with these behavior problems. These drugs are fast-acting and rapidly eliminated which is preferable with the elderly. Types of these drugs are alprazolan, lorazepam, and triazolam. (Hamdy et al., 1998).

Depression is common with early stages of Alzheimer's Disease. Other medications must be considered when an antidepressant is going to be added. The family history may be important. If a medication for depression has worked well on a family member, it would be safe to try on the patient with dementia. It is always best to start with a low dose and slowly increase it. Side effects may be orthostatic hypotension, cardiac irregularities, skin rashes, and liver toxicity. (Hamdy et al., 1998).

Rights of People With Alzheimer's Disease

All people should be treated equally, all people should have a voice in their care, all people should be treated with respect and integrity. People with Alzheimer's Disease are no different. Although they have cognitive impairment and need supervision as the disease progresses, they should always be treated with respect and dignity. (Department of Human Services, Resident Rights, 1997).

Alzheimer's Disease and related dementias continues to be researched. More and more is being learned every year. Education regarding medications, and caregiving needs to be ongoing to provide this population the care and respect the population deserves to have.

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