

**A LITERATURE REVIEW OF THE NEGATIVE IMPACT
OF DEMENTIA ON THE NUTRITIONAL STATUS OF
HOSPITALIZED ELDERLY PATIENTS**

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Abstract

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Dementia is a progressive psychological disorder in the elderly population that leads to cognitive impairment and can have an impact on many areas of their life, especially nutrition. It is very common to see hospitalized dementia patients not receiving proper nutrition because they are unable to feed themselves, and often are not provided with the help they need. Nutrition is often a topic that is overlooked in the hospital setting because of the narrow focus on the patient's diagnosis that caused their admission. Dementia is also a disease that may not be diagnosed until it has progressed to later stages, with the person suffering for many years before interventions take place. This is a very important issue in nursing because malnutrition can lead to further illness and a delay of healing in the elderly, leading to prolonged hospital stays, readmissions, and reoccurring health problems in these patients. This thesis will be a review of medical and nursing journals that look at the impact of dementia on proper nutrition in the hospitalized patients and the different nursing interventions that are used to improve nutrition in these patients. I will also make suggestions for changes in these nursing interventions to improve their effectiveness. A review of the epidemiology of dementia and nutrition requirements of the elderly person will also be included in this thesis.

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Introduction

Most hospital inpatient beds are filled with the elderly, which can be expected because of the aging process and the issues that come along with it. Many times when the elderly are hospitalized, health care personnel including physicians, nurses and nursing assistants focus their care specifically on the diagnosis the patient was admitted for; such as a fractured hip or pneumonia. Of course it is important to identify the issue that brought the person into the hospital and to intervene with treatment, but it is also important to view and focus some attention on all dynamics of the patient and their care. This is done by obtaining a full patient history and performing an overall assessment in order to help them reach full recovery. It is important that one of these factors that is in focus is nutrition. Nutrition is crucial for the healing process of the body because nutrients and calories are converted into energy to assist the body through the healing process and help it return to its normal state of being. Often nutrition is overlooked in the hospital setting because the atmosphere is fast paced and goal oriented, with staff actions being driven by these specific tasks. From experience and from research of the literature, a major issue of the elderly that has been identified, especially those suffering from dementia, is improper nutrition in the hospital due to their condition and other surrounding factors. They often lose the ability to perform self-care and activities of daily living, with one of these tasks being feeding (Watson, 1997). This is such an important topic to investigate in healthcare because poor nutrition in the elderly can lead to malnutrition, the progression of disease or incidence of new illnesses, delayed healing, recurrent hospital admissions, and sometimes mortality (Orsitto, 2009). This thesis paper will be a literature review on the impact of dementia on proper nutrition in the elderly

hospitalized patient population. More attention needs to be brought to this issue including examination of malnutrition causes, methods being used to prevent this, and new methods that could be utilized. A review of dementia and nutrition requirements of the elderly will be covered as background information.

Literature Review

Epidemiology of Dementia

Prevalence and impact.

Dementia can be defined as a progressive condition affecting the neurological system that leads to development of cognitive deficits. It is seen to be progressive and incurable and in the 18th century it was defined as lacking competence and being unable to manage personal affairs (Shagam, 2009). According to Cole (2012), the World Health Organization defines dementia as “a disease of the brain, usually of a chronic or progressive nature, in which there is a disturbance of multiple higher cortical functions, including memory, thinking, orientation, comprehension, calculation, learning capacity, language and judgment” (p. 41). This was before health care providers and researchers were aware that it was occurring because of degeneration in the brain. There are many different faces of dementia and it can be difficult to diagnose and to identify the specific cause. The only way to definitely diagnose dementia is by completing an autopsy of the brain on the deceased individual suffering from the disease. Dementia is an enormous financial health problem, with \$315 billion a year being spent globally and \$100 billion in the US per year. In the US, almost 14% of people over 71 years old have some form of dementia (Chia-chi, 2011). At age 65-69 the prevalence of dementia is about 1/100

people and increases to 1/6 in people over the age of 80. People with dementia make up about 25% of the hospital population and 47% of the nursing home population. One can see why this illness is so costly, because it has such a high prevalence no cure and no single cause and difficult to diagnose. It is a terminal illness and someone will typically live 3-9 years after their diagnosis is made (Smith, 2011). Many view the diagnosis of dementia as a death sentence and see these patients as slowly deteriorating, but what they do not see is how crucial it is to make the last years of these peoples' lives pleasant and enjoyable and that they still deserve to be treated with the utmost respect just like any other human being who is not cognitively disabled.

This disease is shown to take a great physical and emotional toll on the person suffering, their family and their caregivers. Cognitive disabilities such as this are thought to be the most disabling health conditions for the elderly because it makes them extremely vulnerable and dependent on others (Orsitto, 2009). Their loss of cognitive function leads to loss of self-care and the ability to live safely without supervision. Dementia is often accompanied by problems with emotional control, social behavior, and motivation to thrive in life (Dunne, 2010). It is thought that this disease is often unrecognized and unevaluated both by patients, family and healthcare personnel. Often patients and their family are unable to report symptoms because they believe these changes in their behavior or abilities are normal for the aging process. Physicians often have difficulty diagnosing dementia because the screening tools are not very specific or they have limited time with the patient and are not able to identify symptoms of the disease during this period of time.

Diagnosing strategies.

One technique used in the process of diagnosing dementia is the Mini Mental Status exam, which will provide health care personnel with the patient's overall cognitive function level. This exam asked questions that deal with patient orientation, memory, naming and reading. Based on the answers to these questions, the patient earns a certain amount of points in each category that are added up to generate an overall score. This test can be difficult to use because sometimes patients have days or moments when their memory and cognitive function is working properly and others where it is not. The patient with dementia may also give vague answers to the questions asked during the exam that make it appear that they are mentally stable and are aware of what is being asked, when in reality they know their memory is struggling and they are attempting to cover up the problem. Another fault with this assessment tool is that staff will frequently give subtle hints of the correct answer to patients without even realizing they are doing it. As one can see, this is a test that is far from error proof and one may not be able to be diagnosed with dementia solely based on the number provided from this test, which ideally is supposed to place the person in a specific category of the mental status (Coin, 2012).

To work towards making a dementia diagnosis, it is also important for the physician to question the patient about how they are doing managing every day activities, such as bathing, eating, dressing, shopping, cooking, cleaning, paying bills, and attending appointments. This can be done by completing a patient history and frequently talking with the patient about their daily lives. Even though the patient may be confused or forgetful, it is important to ask them if they have noticed any changes in their own behavior because they may be able to express some of their symptoms to you. It is also

very important for physicians to talk with family or friends that have frequent contact with the patient to see if they have picked up on any changes in the patient, mentally or physically. They may have not noticed these changes before, or may have not thought anything of it, but once they are specifically asked they may realize their family member has been acting differently and this can be helpful towards making a diagnosis. It is crucial that a physician keeps in contact with this patient frequently in order to see if there has been any progression in cognitive impairment or new symptoms and to identify if the dementia is worsening. Once the patient demonstrates an increase in cognitive impairment, the physician may wish to carry through with further medical testing to work towards a diagnosis (Coin, 2012).

Further diagnosis includes tests such as MRIs and CT Scans to assess any changes or abnormalities in the brain. One specific result of these imaging tests does not diagnose someone with dementia, but any abnormalities can be thought to be related to the cognitive impairments. These changes may include atrophy of the brain, infarcts and white-matter changes and can be associated with worsening cognitive dysfunction. Lab tests that may be done in order to make a diagnosis of dementia include a complete blood count, basic blood chemistries, thyroid function tests, and a vitamin B12 level. This is because illnesses or medical conditions related to these different levels could cause cognitive issues that are referred to as delirium but they could appear as dementia (Shagam, 2009).

Types of dementia.

There are several different types of dementia, which makes the diagnosing process even more difficult for physicians. Elderly patients may also suffer from delirium, which is a temporary state of confusion that can be caused by several factors and has a rapid onset. The physician needs to rule out any other health conditions that can cause confusion and cognitive impairment in the elderly, including infections, low oxygen saturations, medications, illnesses and surgery. The key to dementia diagnosis is a prevalence of long term symptoms that have a slow onset and seem to progress as time passes. Alzheimer's disease is the most common type of dementia and the 7th leading cause of death in the elderly (Shagam, 2009). It is said to be a leading cause that accounts for 50-80% of the cases of dementia and the exact cause is not known but is thought to occur because of the gradual deterioration of brain nerve cells (Barber, 2011). Another type is Vascular dementia, which makes up 12-15% of all diagnoses of dementia and has an abrupt onset because it is caused by heart attacks and strokes. Vascular dementia occurs because the blood supply to the brain is cut off and disrupts normal brain functioning (Barber, 2011). Another form is Frontotemporal dementia, which is when there are changes or damage to the frontal or temporal lobes of the brain and the cause of it is unknown. One can also have dementia with Lewy Bodies, which occurs when protein deposits are found built up in the nerves cells of the brain and disrupts normal brain functioning. Dementia often occurs in patients with Parkinson's disease, which is another incurable, progressive neurological disease (Shagam, 2009). There are other medical conditions that have also been related to dementia, such as HIV, head trauma, Huntington's disease, Picks disease and Creutzfeldt-Jakob disease. As one can see, Dementia can appear in many different forms and often physicians are unsure of what

exactly they should be looking for or what to correlate this degenerative disease to, which makes it a challenge to diagnose and even more of a challenge to provide medical interventions.

Stages of the disease.

Dementia is often seen in different stages, ranging from early to late, with the severity of the disease progressing and more symptoms emerging as time goes on. During the early stages of dementia, family and friends may not notice any difference in the person suffering because changes may not be present or may be very minimal from their baseline. The patient may have symptoms such as being forgetful, trouble focusing, feeling disoriented at times, depression, and having fear and anxiety about the changes occurring. As time goes on, the patient might have difficulty recognizing people, have trouble doing tasks such as paying bills and may become restless and agitated with themselves and others. These people often become disoriented, forgetful and will repeat actions or repeat themselves in conversation. This stage of dementia could last for months to years. The diagnosis of dementia is usually made during the next stage, where the patient tends to have mood swings, impaired judgment, increased and more frequent disorientation, trouble speaking, and wandering. Diagnosis is most likely made during this time because of such drastic changes from baseline behavior. After this point, the patient often becomes dependent on others for part or all of their care. They are unable to make decisions on their own, unable to complete activities of daily living, unable to recognize family members and have trouble communicating. They also may need to live in long-term residential care so they can be monitored for safety and receive assistance with tasks that they are unable to complete. The last stage is the end stage which is when

the patient usually loses all ability to communicate and respond. They are usually placed on palliative care, which is treatment for comfort, but not for a cure (Orsitto, 2009).

Nutrition Requirements of the Elderly

Since patients diagnosed with progressive dementia suffer from cognitive impairment including feeding and eating difficulties, it is clear to see how they may not be getting proper nutrition. Many of these patients need assistance with feeding and eating for every meal (Watson, 1997). Obtaining proper nutrition is very important in the elderly population and is crucial to recovery from injury and illness because their bodies are more sensitive to change and often already suffering from other comorbidities. Their body systems' functioning ability is also changing, including a weaker immune system, brittle bones, respiratory and cardiac complications, incontinence, vision and hearing loss and decreased muscle mass. Poor nutrition or malnutrition may be more difficult to recognize in the elderly. There are several illnesses the elderly have that could lead to decreased food intake, with one major disease being dementia. The body prefers a constant and steady flow of glucose throughout the day in order to function properly and one should consume foods that provide calories that also provide energy and important nutrients. Elderly people are often known to eat "empty calories" such as breads, muffins and pasta because they are easily accessible and easier to prepare. They are often known to eat smaller portions, so it is important to encourage them to eat foods that are energy and nutrient packed (Turner, 2011).

The elderly have declining energy needs and slowing metabolisms so they require a lower daily caloric intake requirement. They also become less active as they age, which

also means they require less calories. While the elderly do require fewer calories, it is still important that they consume nutrient-dense foods in order to make sure they are getting enough nutrients (Baker, 2007). Ideally, an elderly person should be eating an increased amount of protein that should account for about 15-20% of their daily total calories.

Protein is a great source of long-term energy that is very helpful in the healing process.

They should have a reduced intake of fats with that consisting of 30% of their total daily calories. Fat calories are often not useful as the body gains more from calories that come from other sources such as protein. Carbohydrate intake should account for about 50-60% of their daily calories and they should be drinking about 6-8 glasses of water.

Carbohydrates provide quick releases of energy which is needed for daily life functioning and water keeps the body hydrated and able to function properly (Baker, 2007).

It is also very important that the elderly have a diet that is sufficient in all crucial vitamins and minerals and they may need to take a supplement for this if they have a deficit. Vitamin and mineral deficits can cause severe issues in the body and can be interrelated to every system of the human body. Sufficient fiber should also be in the diet to prevent constipation and to help the elderly have regular bowel movements due to the fact that as we age, our gastrointestinal tract tends to slow down the digestive process (Baker, 2011). The elderly should also be informed of foods that are good sources of nutrients that will help to keep them in good health. Meat, poultry, eggs and fish are a good source of protein, healthy fats, iron and many different vitamins. Dairy products such as cheese, milk and yogurt are also good sources of protein, health fats, vitamins, and also calcium. Vegetables and fruit are extremely important to the diet and serve as a great source of fiber. They also have many vitamins and minerals. One of the most

important vitamins to the elderly is vitamin D, which promotes healthy and strong bones because often times the elderly suffer from weak and brittle bones. Breads and cereal are also a good source of fiber and other nutrients. Fluids are extremely important to the body and water is the best source of fluid because it does not have any added preservatives. Lipids are also important to the brain since 60% of it is composed of fat, including the myelin which protects the nerve cells and connecting nerve. It is important to consume healthy fats to support the brain's structural build up and to provide energy. Essential fatty acids are a part of diets that impact things such as vision, nervous system function, immune and inflammatory responses, and modulation of gene expression. It has been shown that a daily fatty acid supplement leads to improved learning and memory function in healthy older adults with age-related cognitive decline (Morris, 2011).

There are also some vitamins that have been directly linked to dementia and it is thought that a deficit of these vitamins can contribute to the progression of symptoms. These important vitamins include B6, B12 and folic acid. Folic acid can be found in broccoli, bananas, oranges, asparagus, brussel sprouts, chickpeas, brown rice, and fortified cereal. B vitamins have been associated with brain functioning and low levels have been proven to be related to memory issues and trouble with learning (Turner, 2011). Sources of B6 include pork, chicken, turkey, cod, bread, whole cereals, eggs, soy beans, vegetables, peanuts, milk, and potatoes. B12 is found in meat, salmon, cod, milk, cheese, eggs, yeast extract, and fortified cereal. Another vitamin that is extremely crucial to the neurological system specifically is vitamin E and is thought to play a large role in the developing brain. A deficiency of this vitamin is thought to have symptoms of lack of reflexes, ataxia, decreased vibration sensation, paralysis of eye muscles and a decline in

cognitive function. Vitamin D is also thought to be a crucial vitamin for cognitive health and preservation. Vitamin D deficiency in elderly population has been correlated with cognitive impairment. Vitamin D rich foods include cod liver oil, salmon, shrimp, sardines, fortified milk and juice (Turner, 2011).

Antioxidants also play an important role more in the aging brain than any other organ because of the fact that there are fewer antioxidant enzymes that work to protect neurons. Turner (2011) explains, “research suggests that the combinations of antioxidant/anti-inflammatory polyphenolic compounds found in fruits and vegetables can significantly reduce the risk of developing cognitive impairment, as well as reverse age related deficits in neuronal and cognitive function” (p 103). Antioxidants often assist fatty acids and vitamins in order to break down food and help the functioning of our brain’s neurotransmitters that are impacted by our diet (Irving, 2003).

Malnutrition Related to Cognitive Function

The human brain has four neurotransmitters that are actually directly correlated with one’s diet. These include serotonin, dopamine, norepinephrine, and acetylcholine and any change in diet can also impact these neurotransmitters. Changes in these neurotransmitters can have an impact on a person’s behavior, eating and sleeping patterns, and their energy level. Serotonin is produced by the amino acid tryptophan and is assisted by vitamins B6, B12, and folic acid. A protein-rich meal lowers tryptophan and serotonin while a carbohydrate rich one increases it. This is because tryptophan competes with other amino acids and a low amount of tryptophan gets through to the brain. High serotonin levels increase feelings of calmness, improve sleep patterns,

increase pain tolerance, and reduce cravings for food (Turner, 2011). This is what one will experience if they eat carbohydrate-rich foods. Dopamine and Norepinephrine are produced by the amino acid tyrosine and it is assisted by folic acid, magnesium and B12. Tyrosine increases after protein rich foods which causes an increase in dopamine and norepinephrine. An increase in these causes an increased alertness and energy. Acetylcholine is produced by the amino acid Choline. This neurotransmitter is correlated to memory and general mental function and lowered Acetylcholine levels have been seen in elderly, which leads to memory loss and reduced cognitive function (Morris, 2011). Although that was just a general overview of the impact of diet and food on the neurotransmitters of the brain, it is clear to see that our eating habits are directly correlated to our cognitive abilities as human beings. Any changes in diet and especially a lack of diet will impact one's ability to function because these neurotransmitters are unable to work properly. Dehydration and malnutrition can lead to further issues such as skin breakdown, urinary tract infections, falls, exacerbation or confusion and early death so the importance of a proper diet in the elderly is evident (Cleary, 2012).

Malnutrition is viewed as both a possible cause and consequence of dementia. It is shown to compromise the immune system, impair wound healing, increase hospital admissions and increase mortality. If a patient suffering from dementia is able to gain weight, then they can reduce their risk of morbidity and mortality. Research has shown that hospital patients that have a diagnosis of dementia have poorer outcomes in the length of their hospital stay and mortality rates (Smith, 2011). Many times, the nutritional status of a patient can be correlated to their extent of dementia and cognitive impairment. Poor nutrition is associated with a higher incidence of dementia and can also

cause cognitive decline to progress at a faster rate. It has been proven that inadequate consumption of calories can lead to impaired mental functioning. This can be shown when someone skips breakfast and has trouble focusing at work or at school. Imagine if skipping one meal can impact your mental status what skipping meals every day can do for one's cognitive ability (Irving, 2003). This was demonstrated in a study that assessed Body Mass Index (BMI) and the progression of dementia in the elderly. The researchers in this study followed 60 elders with untreated dementia in an outpatient setting for 12 months. Results showed that patients with a baseline BMI of 25 or greater had much higher scores on the mini-mental status exam, which is the test used to diagnose dementia. A low BMI was then identified as a risk factor for overall cognitive impairment. Their findings showed that the participants with severe cognition impairment, which is a score of less than 10, made up 11% of the group with a BMI of less than 25. Their hypothesis of these findings was that the effects of lower BMI on cognitive function could be related to a long-standing poor nutritional status. Another consideration to think about is that dementia could be having the effect on BMI because as the disease progresses, the patient has issues with feeding (Coin, 2012). As feeding issues occur, the person with dementia is consuming less food and continuously losing weight, causing their BMI to decrease. As one can see, it can be viewed that poor nutrition can lead to dementia and also that dementia can lead to poor nutrition.

Causes for Inadequate Nutrition

There are several reasons why a patient with dementia in the hospital situation is not receiving proper nutrition. Patients diagnosed with dementia typically have a 10% weight loss over 6 months, which is a large percent of their overall body weight. Many

elderly are already frail and cannot afford to lose this amount of weight (Cleary, 2012). One reason is because they are unable to access their food tray. It is either out of their reach or their bodies are not strong enough to feed themselves. They may have a physical injury that prevents them from moving around on their own or they may have their bed alarm on because of their confusion and cannot get up without setting the alarm off. They also may not have enough cognitive functioning ability to recognize that it is meal time and that their meal is present unless someone sets the tray up in front of them and prepares the tray to be eaten. They may sleep through meal times if staff does not awaken them when meals are delivered and prompts them to eat. Often times, staff will see patients sleeping and take this as a sign that the patient is not hungry or is too tired and needs their sleep. The truth is that these patients really are in need of verbal cuing to tell them to eat. It is also true that nutrition is just as important as sleep on the road to recovery from illness or surgery for the elderly. It is great that they are getting adequate sleep; but it is also crucial that they are getting adequate nutrition as well. The body is not able to heal if it does not have the proper energy source to carry out the healing process. Also, it is common that elderly patients who are confused do not understand they are in the hospital and that these meals are free. They frequently will decline meals and say that they are not hungry because they believe they have to pay for this tray and they do not have their wallet or any money with them to pay. These are all problems that are related to the patient just accessing the tray to even attempt eating.

There are also several issues that a patient with dementia may have once the tray is accessed and they attempt to eat. Often times dementia patients develop dysphagia, which is difficulty swallowing. It is thought that 45% of dementia patients will have this

problem at one point or another. This leads to a risk of aspiration, which is the process of food going into the patient's airway when swallowing. Many times when a patient is found to be at risk for aspiration, they will be put on a modified diet to help protect them from this. This modified diet includes things such as softer foods, usually a texture of ground or pureed. The liquid consistency will usually be changed from thin to a honey or nectar consistency because it is much easier to choke on thin liquids. The problem with these foods and liquids is that they are usually diluted with water so the nutritional value is not the same as if the food was in its regular consistency. Then there is the issue that most patients find these common foods in different forms or textures as unappealing and inedible and often times will not even eat (Smith, 2011). They would simply rather not eat than eat something that looks so unappetizing to them. Culture can also have a big influence on food consumption. Often times, these patients do not like the foods that they are being served and are not given an option, so they simply will not eat. They may come from a culturally different background and they are not accustomed to the foods that are being served to them. Their eating expectations, including how much they should eat may be different and they may eat their meals at different times that do not coincide with the hospital meal times (Chia-chi, 2011).

Other physical disabilities that are common in the elderly may also be interfering with their eating ability. They may have issues with dentition, such as poor fitting dentures or no teeth at all and a patient with dementia in the late stages is unable to tell someone they need better fitting dentures or that they need help cleaning them or putting them in. They may also have forgot to bring their dentures to the hospital or may not have the bonding solution used to keep them in place, which can make eating very frustrating

and almost impossible to the point where they give up. The elderly may also have vision loss so they may have trouble seeing their food and have issues with hand-eye coordination. This can also make eating extremely frustrating and they may need a staff member to actually guide them with the food and utensils to be able to eat. These elderly patients may also suffer from other conditions that make feeding very difficult, such as generalized weakness, arthritis, history of strokes and many more (Irving, 2003).

A person suffering from dementia also may lose weight because of new behaviors, such as pacing and wandering. These patients also get distracted very easily and will simply forget to eat many times or they may think they already ate (Morris, 2011). In my practice as a nursing assistant, I have come across the issue that I encourage patients to eat their meal and they will repeatedly tell me that they already ate when in reality they did not. It can be extremely difficult to convince them that they have not eaten yet because they often times do not realize they are confused and believe their memory are working properly.

The drastic change in environment can also cause issues with eating in the elderly with dementia. The hospital is an unfamiliar environment to these people, and can be even more overwhelming because they suffer from cognitive impairments. They could be distracted by frequent beeping of machinery, people walking by in the hall, and staff coming in their room often for different reasons (Chia-chi, 2011). They may have specific meal time routines that they follow at home or at an assisted living home and the same person may feed them every day in the same setting. Because of their impaired cognitive functioning, they may not be able to accept and adapt to the changes that are occurring around them during their hospital stay. This may cause them to become

introverted and refuse to participate during mealtime because they feel confused, lost and anxious. Often patients with dementia have trouble trusting or relying on strangers so they may refuse the help of the staff if they do not feel comfortable with them, leading to them not eating during meals (Dunne, 2010).

Current Interventions to Improve Nutrition

There are different screenings used to assess the elderly and their feeding and swallowing ability that are used in the hospital. This may be done by the nurses, occupational therapy or some hospitals even have specialized speech and swallowing therapy. One instrument used is the Edinburgh Feeding Evaluation in dementia. This assessment is used to determine the level of help the patient needs to eat based on observation of the patient. Watson (1997) explains that some questions included on this questionnaire include:

“does the patient require supervision while eating, does the patient require physical help when eating, is their spillage while eating, does the patient tend to leave food on the plate at the end of the meal, does the patient ever refuse to eat, does the patient turn their head away while being fed, does the patient refuse to open their mouth, does the patient spit out food, does the patient leave mouth open allowing food to drop out, does the patient refuse to swallow, and identifying the appropriate level of feeding care for this patient” (p. 406).

A few issues with this assessment tool is that it does not address common feeding difficulties such as keeping food in the mouth, chewing difficulty, swallowing, and paying attention. This tool is very useful to identify feeding problems but needs to

continue to be developed in order to be used as a reliable tool for feeding needs of the patient with dementia (Watson, 1997). Another screening tool that is used is the Feeding Behaviors Inventory. This is an assessment that looks at 33 common mealtime behaviors that seem to be problematic for adequate food consumption. This is often used with Alzheimer's to develop care plans for meal times for the patient. The problem with this is that it is typically only used when assessing the consequences of feeding difficulties when the malnutrition has reached a dangerous and extensive level. The last assessment tool used is the Eating Behavior Scale which measures the ability of patients with dementia to perform 6 eating behaviors. The problem with this is that there are no criteria that can be observed to determine if behaviors were present or not, so the results are not effective or useful (Watson, 1997).

There are some feeding techniques that many facilities have in place in order to assist the patients with dementia during meal time, but I do not believe that they are adequate or fulfill the needs of these patients. Hospitals often assign staff members to feed patients who clearly are incapable of feeding themselves. The issue with this is that for the most part, staff is only assigned to feed the immobile, bed bound and unresponsive patient who is easy to identify as confused. But what about the little elderly woman in the next room over who is watching television calmly in her room and looks content, but does not touch her meal? The fact that she is not eating does not mean that she is not hungry or does not want to. The woman may actually have dementia and not even realize it is meal time or that the tray is in front of her. She also may have arthritis and is unable to open up or uncover her meal. Many times the staff looks at physical body language and cues in order to recognize when a patient is in help. This is not enough and

staff may not be able to recognize that the patient actually does need help. It has been shown that those with only moderate feeding difficulties who could still feed themselves were ignored by staff and left on their own, while those with severe feeding difficulties who required physical assistance by staff had greater food intake because they were receiving more assistance from the healthcare personnel (Cole, 2012). This is clear evidence that people with any feeding difficulty or dementia, not just the severely impaired should get the appropriate level of assistance from staff in order to obtain proper nutrition.

Another technique that is also being seen more often in the hospitals to help patients obtain proper nutrition and adequate calorie intake are supplemental shakes or drinks, such as Ensure or the diabetic version Glucerna. These drinks are fortified with nutrients, vitamins and calories and one individual drink contains roughly 300 calories (Stanner, 2006). These supplemental drinks are recommended to supplement or add to, the meal of a patient who has a decreased appetite or weight loss. Many times dieticians will add in an order for one of these drinks three times a day with every meal tray. While these are an excellent way to have the patient obtain calories quickly and easily, they are being seen as meal replacements and that is not their purpose. Staff frequently will skip the meal all together because they know the patient will have difficulty eating it or they may refuse it. Instead of making the attempt to eat that balanced meal, these drinks have been seen as the first attempt for feeding with patients with dementia. These are a great supplement when patients with dementia are not consuming enough food, but they should not be all that the patient is consuming. While they are high in calories, vitamins and mineral, obviously whole foods presented in a balanced meal should be the first choice

(Stanner, 2006). As Stanner (2006) raves about the effectiveness of these supplements on improving cognitive function and shorter hospital stays, she also reminds the reader that “oral nutritional supplements should not be regarded as a substitute for meals and snacks, although they may occasionally be used to replace food when patients are very ill, or are unable to eat” (p. 18). Also, patients who have poor appetite may only drink the supplement and become full from that alone and then refuse their meal, which defeats the purpose of the supplement, which is supposed to add to the meal and not be a replacement (Cole, 2012).

Suggestions for Improvement

There are several solutions and adjustments that can be made to help improve the nutrition of the elderly patient with dementia. The first solution would be to communicate with the caregiver or the family to see what is usually done for this patient during meal time and to see if they have any feeding difficulties and what techniques are used. Having the family involved in this situation is often very helpful since they are with the patient during all of their meals and they know their habits. Patients may also consume more food when family is present because they can make a connection between family and eating and they feel comfortable. Familiar faces allow them to feel more at ease and more comfortable in their present environment. The family may have better techniques and often times patients with dementia will only let people they are close with help them to eat (Cole, 2012). One solution is making a better environment is to make it as “home-like” as possible. One can begin by making changes in dining environment if possible. There should be appropriate lighting, adequate space, and limitation of distractions. Some patients may enjoy listening to music while they have their meals

because they may do this at home. Television may need to be turned off with the patients with dementia if it becomes too distracting and is preventing them from eating (Chia-chi, 2011). Patients may consume more food if they are able to have foods that they enjoy and that they consume at home. Families should be allowed to bring in food to the patients as long as it coincides with the current hospital diet they are on based on their health conditions. The patients should also have access to snacks so they are able to eat at times when they are hungry, not just when the meal tray gets brought up to their room. The aroma of food may also make a patient hungrier, so this can be a technique to try if they are not eating well.

It is crucial that staff working on the floors are doing patient rounds during meal time and individually checking in on patients to see and ask if they need help. The patient may tell you that they do in fact need to be set up to eat, while the more confused patients may not have the ability to recognize this. This is when the family may come into play and be of a big help to inform the staff that their family member does need help with feeding. Also, after a few meals with the patient it can become easier to identify that the patient does have a feeding problem and this should be assessed and documented. This makes the rest of the staff and the next shift aware that this patient needs assistance and should be helped during mealtimes. Communication is crucial with nutrition in the hospital. It is important for dietitians working in the hospital to see the patients to form a proper diet based on their health status and conditions. It is also important for the patients to be assessed by therapy and by the nurses and document their findings. It is then necessary for food service workers to communicate with the patient to identify foods that they enjoy eating that also agree with their diet that has been chosen by the dietitian. It is

important for all staff to make sure that the food and liquid consistency and content is patient appropriate before allowing them to begin eating to avoid possible problems, such as aspiration. It is also important for nurses to communicate with CNAs working on the unit about which patients need to be assisted in eating based on assessments and past meal time behaviors. Proper communication will make this a much smoother process and will improve the patient's nutrition immensely (Cleary, 2012).

The patient with dementia in the hospital may often need one to one assistance and most feeds are done by a certified nursing assistant with meals. Proper communication will help the nursing assistant figure out which patients can eat independently, which ones should be set up for eating, and which ones actually need to be fed. These CNAs often only have basic feeding training. They may be unprepared for challenges with cognitive impairment and rely on the nurse to assess and guide the person helping to feed the patient. Due to the lack of knowledge and experience with dementia, the nursing assistants may be intimidated or afraid to feed this patient and may not be as assertive as they should when trying to feed the patient. They may simply accept the patient's refusal when they ask them if they would like to eat because they are not sure of what else to do or how else to approach this patient or they make believe this patient is cognitively able to make this decision. Any staff that will be feeding patients should be required to take a training course on proper communication and feeding techniques with a patient suffering from dementia or even delirium. They need to be taught that communication is the key with these patients that that they should maintain eye contact with patient. Many untrained staff also due not realize that these patients rely on caregivers; or in this case hospital staff, to physically assist them to eat or to verbally cue

them. They may need to cut up their food for them and they may even need them to put the food in their mouth. They also may need to be told to try to take another bite if they stop eating for an extended period of time because they rely on these verbal cues. The process of feeding someone is assessing what their abilities are and then applying their abilities during meal time, while having staff fill in for what the patient is not able to physically or mentally do on their own (Chia-chi, 2011). For example, a patient may not be able to cut up her food and pick it up with the fork, but she may be able to bring the fork to her mouth and physically feed herself. It is important for staff to encourage these patients to do what they are capable of because this preserves some of their cognitive functioning ability and also their independence and ability to provide self-care, which is significant for many elderly people who feel that they are losing control in many different aspects of their life.

It is important for patients with dementia to feel comfortable with the staff feeding them and not like they are being force fed or rushed through their meals, which can be very nerve-racking and anxiety producing. Although it is difficult in the hospital setting, it is helpful to have a consistency in the patient care assignments when discussing feeding (Chia-chi, 2011). The health care personnel are able to interpret feeding behaviors and begin to acknowledge effective feeding strategies for these specific patients after working with them after a few meals. This allows them to communicate with the patient better and will most likely lead to increased consumption during meal time and will increase the patient's comfort level. Although these nursing and staff intervention to help patients with dementia with feeding are time consuming and mentally exhausting, they are completely necessary in order to keep the patient alive and well. It is

thought that nurses spend about 25% of their time with elderly patients with dementia trying to feed them (Watson, 1997).

Conclusion

As one can see, there are several factors related to the diagnosis of dementia that can interfere with one's nutritional intake. This issue seems to escalate even more in the hospital setting due to the focus on other health issue issues of the elderly patient. Proper nutrition is extremely important for the elderly in order for them to regain their strength and health and it is crucial that all hospital staff begins to focus on this issue. There are several techniques that work in improving the elderly patient's nutrition and although they may be time consuming, they are effective if carried out. Dementia is a very difficult illness for one to live with and it makes it almost impossible for this person to continue on with their daily life without assistance. It is important that this issue becomes discussed more since such a large portion of our elderly population suffers from it. Not only does improper nutrition or malnutrition prolong illness, or even cause mortality in the elderly, it also prolongs hospital stays and costs the hospital money that they could be using more efficiently instead of continuing to readmit these patients to the hospital due to their poor health conditions.

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