

# Dementia & Delirium

## Objectives

When you complete this module you will be able to:

- Recognize cognitive changes that are not a normal part of aging.
- Differentiate between dementia, depression, and delirium.
- Describe how nurses assess cognitive function in older patients admitted to their facilities.
- Recognize standardized assessment tools and their use in measuring cognitive impairment.
- State why information shared by the patient's family and previous caregivers is important for nurses.
- Match appropriate nursing interventions to the needs of patients with different kinds and degrees of cognitive impairment.

## Introduction

As our population ages, nurses are encountering more patients with cognitive challenges. However, it is wrong to stereotype older people as inevitably failing in mental capacity. It is up to nurses to sort out their expectations of normal aging from states of disease. Nurses have to rely on their own assessment skills in this area. Only about a third of those with dementia, for instance, have a formal diagnosis or some indication of it in their medical records.<sup>1</sup> Nursing assessment is critical to initiating treatment in those cases of reversible cognitive impairment. It is the first step in making up a nursing care plan that accommodates for irreversible and progressive impairment.

This course explores the nursing care of older people who are cognitive impaired. It emphasizes dementia and delirium. Statistics reflect the importance of this topic:

- In the United States, 13% of the population was over 80 years old in 2000.<sup>2</sup>
- Of those over 71 years of age, 14% had dementia.<sup>3</sup>
- Of those over 85 years of age, 36% had dementia.<sup>4</sup>
- Of those in long-term care facilities, 74% had dementia.<sup>5</sup>
- Of hospitalized patients 65 years or older, 25% had dementia.<sup>1</sup>
- Of hospitalized older patients with dementia, half also had delirium.<sup>6,7</sup>
- Of ICU patients, 40 to 87% experienced delirium. Older adults had the highest occurrence.<sup>8</sup>

Cognitive impairment that goes unrecognized, untreated, or inadequately managed will lead to several consequences:

- Functional decline.
- Accidents such as falls.

- Untreated pain.
- Malnutrition and dehydration.
- Sleep disturbances.
- Behavioral problems.
- Escalating financial burdens.
- Family and caregiver stress.

## Cognitive Impairment

Cognitive function (the ability to think) has many different aspects. It is not enough to note that someone has trouble thinking in a global sense. Specific mental deficits have to be identified for diagnostic and care-planning purposes.

Aspects of cognitive function are:

- Alertness or level of consciousness.  
Does the person respond to stimuli? Can the person be roused to respond?
- Attention.  
Can the person concentrate?
- Memory.  
Can the person register, retain and recall information?
- Thinking.  
Can the person organize their thoughts and share them?
- Perception.  
Does the person perceive the environment realistically?
- Psychomotor behavior.  
Is the person's behavior appropriate? Can the person carry out simple motor tasks at will?
- Higher cognitive functions.  
Can the person perform complex mental tasks?
- Insight.  
Does the person understand oneself in the context of the situation?
- Judgment.  
Can the person determine reasonable action steps based on a situation?
- Executive function.  
Is the person capable of self-control, self-direction, and directing others?

Some changes in cognitive function occur naturally with aging. These changes occur slowly. The majority of older people retain stability and function well. They learn to compensate for progressive deficits. It is normal, for example, for older people to:

- Have decreasing attention-spans.
- Have increasing difficulty in multi-tasking.
- Find it difficult to filter out irrelevant information.
- Process information at a slower speed than younger people.
- Struggle with finding the right words and remembering names.<sup>2</sup>

Older adults who cope well with cognitive changes keep their mental skills sharp by using techniques to compensate for failing memory; challenging their minds with puzzles, games and learning tasks; and establishing habits to outwit their failings.

Three terms for abnormal cognitive function explored in this course are dementia, pseudodementia, and delirium. These are terms descriptive of a set of symptoms or a syndrome, as opposed to definitive disease states.

Dementia is defined by a collection of symptoms that develop insidiously. This means that problems develop sneakily and are not overtly obvious in the beginning. Dementia becomes chronic and progresses irreversibly.<sup>10</sup> The course is individualized with no predictability as to its pattern.<sup>2</sup> Intellectual abilities are lost, causing problem-solving and decision-making incapability. Memory is erased and learning ability is stunted. Patients with dementia may demonstrate any or all of these symptoms:

- Apraxia: Inability to use objects.
- Aphasia: Inability to speak or write.
- Agnosia: Inability to understand or interpret.<sup>4</sup>

Dementia eventually incapacitates people from carrying out activities of daily living (ADL). It alters the personality and wrecks havoc on all relationships. People with dementia often have difficulty with emotional control. They may present behavioral problems for themselves and for their caretakers.<sup>11</sup>

Pseudodementia is not true dementia. This term refers to the temporary occurrence of dementia symptoms such as amnesia. This may be caused by a blow to the head, a stroke, substance abuse, or a severe emotional trauma.<sup>12</sup> People with pseudodementia are aware of their cognitive loss and react to it with depression.<sup>2,10</sup>

Delirium is an acute confusional state that begins abruptly and follows a fluctuating course. It is most often reversible. It is frequently associated with a medical illness and is characterized by an autonomic nervous system disturbance. This is evident from symptoms of tachycardia, hypertension, fever, sweating and piloerection.<sup>10,13</sup>

Some of the key symptoms of delirium are: <sup>4, 6, 13, 14</sup>

- Hallucinations.
- Attention deficits.
- Hypersensitivity to stimuli.
- Inability to make decisions.

- A disturbed sleep-wake cycle.
- Disorganized thinking (incoherence).
- Agitation or stupor, or most commonly a mix of the two.

### ***Comparison of Dementia, Pseudodementia, and Delirium***

	<i>Onset</i>	<i>Course</i>	<i>Features</i>
<i>Dementia</i>	Slow	Permanent + progressive	Loss of memory + intellectual abilities
<i>Pseudodementia</i>	Sudden or slow	Reversible	Cognitive losses.
<i>Delirium</i>	Sudden	Temporary + fluctuating	Acute state of confusion.

### **Causes of Cognitive Impairment**

The causes of cognitive impairment are multiple and accumulative. Anything that affects the brain will alter cognitive function to some degree. Sometimes the alterations are permanent, for example when nerve cells die. Sometimes the alteration proves to be reversible, for example when toxicity is cleared.

The most common cause of dementia is Alzheimer’s disease (AD). This accounts for at least half of all dementia cases and perhaps as many as 80%. Vascular dementia, both single and multiple strokes, accounts for almost a fifth of dementia cases. A mixed form of AD and stroke accounts for another fifth of cases.<sup>1, 3, 15</sup>

Diseases causing dementia in the remaining one out of ten cases are:

- Parkinson’s disease.
- Lewy body dementia.
- Huntington’s disease.
- Frontotemperol dementia.
- Creutzfeldt-Jacob disease.
- Normal-pressure hydrocephalus.

Dementia can be a complication of other conditions such as:

- Poisoning.
- Brain tumors.
- Nutritional deficiencies.

- Metabolic abnormalities.
- Reactions to medication.
- Infections such as brain abscess, encephalitis, or AIDS.
- Anoxia or hypoxia associated with heart and lung problems.

11, 16

Pre-existing dementia or cognitive impairment is one of the risk factors for delirium. However, the list of causes for delirium is long. Some causes may be precipitating factors and not primary causes. There is usually a combination of factors involved and/or an accumulation of stressors that triggers delirium.<sup>17</sup> Advanced age may be the biggest risk factor because older people are more vulnerable to all stressors. Their homeostatic regulation capacity is diminished.<sup>10</sup>

Causes of delirium are:

- Pain.
- Fever.
- Heatstroke.
- Malnutrition.
- High altitude.
- Hypoglycemia.
- Seizure disorders.
- Sleep deprivation.
- Reye's syndrome.
- Vision impairment
- Endocrine dysfunction.
- Traumatic brain injuries.
- Hepatic and renal diseases.
- Infection and inflammation.
- Fluid and electrolyte imbalances.
- Cardiac and pulmonary problems.
- Exposure to environmental toxins.
- Reactions to use or withdrawal of alcohol and medications

7, 12, 13, 14

Hospitalization itself often precipitates delirium in older people. Surgery especially is a risk factor and orthopedic surgery in particular is often a trigger. Physical restraints, bladder catheters, sensory deprivation, sensory over-stimulation, and anything that limits normal function can trigger delirium.<sup>4, 6, 13, 17</sup>

Research studies now focus on separating delirium out from pre-existing dementia. The task is difficult considering the many potential causes for both.<sup>4</sup> Drug-induced cognitive impairment is the top concern of researchers. One study shows that 80% of older people who use anticholinergic medications, for example, have some cognitive impairment from them.<sup>18</sup>

Another gray zone is the effect of depression on cognitive function. Untreated depression causes a pseudo-dementia. This is a global cognitive impairment that affects attention, memory, psychomotor speed, processing speed and executive function. Even with treatment, depression continues to create deficits in executive function and processing speed.<sup>19</sup> This is important to note this when setting goals and expectations for long-term care.

## **Screening, Assessments, and Diagnosis**

Your primary purpose in assessing patients for cognitive impairment is to help you to plan nursing care. Hospital stays are generally too short to support a definitive clinical diagnosis. However, ongoing informal assessments and documentation may justify the scheduling of formal assessment after the initial crisis requiring hospitalization has been resolved. The prognostic value of a diagnosis is the opportunity to either reverse causes or plan for the future.

Assessment of cognitive function begins on admission. It is a reasonable routine for all patients over 75 years of age because of the statistical probability of dementia in this group.<sup>1</sup> Cognitive impairment is widely unrecognized by nurses because of the slow progression of dementia that allows for compensatory adaptation. It is often a crisis which creates behavioral problems indicating a need for assessment.<sup>20</sup> Furthermore, delirium is not identified in up to 70% of hospitalized older people.<sup>17</sup> Nurses remaining unclear on the differentiation between dementia and delirium may be contributing to this problem.

Conduct an assessment of cognitive function by:

- Looking through medical records for any mention of Alzheimer's disease or other type of dementia.
- Questioning the patient, family and previous caretakers on the patient's history of cognitive function.
- Determining if the present state of cognitive impairment is new, chronic, fluctuating, or progressive.
- Using informal assessment tools when the patient is relatively comfortable, pain-free, alert, and unhurried.<sup>9</sup>

These tools are strongly recommended in current nursing literature:

- 1) Family Questionnaire
- 2) Patient Behavior Triggers for Clinical Staff

These tools were developed by the Hartford Institute for Geriatric Nursing, College of Nursing, New York University. They are part

of the “Try This Assessment Tools Series” available @ <http://www.ConsultGerRN.org>.

### 3) The 2-Question Depression Screening Instrument:

“During the past month, have you been bothered by feelings of sadness, depression, or hopelessness? “

“Have you been bothered by a lack of interest or pleasure in doing things?”<sup>21</sup>

Follow-up the admission assessment with monitoring of patient behavior and communication. Pay particular attention to disorganized thinking. This is vague, illogical, irrelevant and/or incoherent talk.<sup>17</sup> This may be a clue to delirium if it was not present prior to the current crisis. Problems in orientation and memory are not as reliable because these symptoms are common among all hospitalized older people.<sup>6</sup>

Before a formal assessment of cognitive function is done, practitioners will investigate into physical causes of cognitive impairment. They will conduct physical and neurological exams, blood and urine tests, dehydration measurements, imaging studies and EEGs.<sup>14</sup> They will note evidence of autonomic nervous system disturbance. They may order arterial blood flow studies. In the brain they may look for abnormal protein buildup (plaque and tangles). In patients with known Parkinson’s disease, AIDS, or Huntington’s disease, they will compare their expectations of cognitive status to the current state of disease progression. They may find that the impairment is not consistent with the timeline expectations, pointing to a potentially reversible impairment.<sup>16</sup>

Formal, standardized diagnostic tools used to sort out delirium, depression and depression measure emotional state, cognitive skills and functional status. The tools most commonly used are:<sup>5, 6, 8, 10, 17, 22</sup>

- Mini-Mental State Examination (MMSE).  
This is a five to fifteen minute test consisting of 16 items. There are both straight questions and directions for action involved. The score range is 0 to 30, with scores below 24 indicting cognitive impairment.
- Mini-Cog.  
This three minute test is sensitive for detecting mild to moderate dementia. It involves patient recall of three items and an additional test of drawing a clock if the recall test result is uncertain.
- Short Portable Mental Status Questionnaire.  
This test consists of ten questions. The score range is 0 to 10 with a higher score indicative of greater impairment.

- **Confusion Assessment Method (CAM).**  
 There are long and short versions of this test which is used to diagnose delirium. It assesses ten groups of symptoms listed in the DSM-IV: acute onset, fluctuating course, inattention, disorganized thinking, altered level of consciousness, disorientation, memory impairment, perceptual disturbances, psychomotor activity and sleep-wake disturbance. The clinician answers nine questions following an interview with the patient. The diagnosis of delirium requires;
  1. A fluctuating course.
  2. Inattention.
  3. Either disorganized thinking or an altered level of consciousness.
 In the ICU setting, an adapted CAM is used. Yes/no questions and special pictures are used for non-speaking, mechanically ventilated patients.
- **Delirium Rating Scale (DRS) and the Memorial Delirium Assessment Scale (MDAS).**  
 These tests rate the severity of delirium.
- **Bedside Confusion Scale (BCS).**  
 This test requires active patient participation to diagnose delirium. It is considered as useful as the CAM.
- **Geriatric Depression Scale.**  
 This test is useful in mild to moderate cognitive impairment. The short form is best for patients with dementia because it takes only five to seven minutes. There are 15 yes/no questions. The score range is 5-8 for mild depression, 9-11 for moderate depression and 12-15 for severe depression.
- **Neuropsychiatric Inventory (NPI).**  
 This test assesses behavioral changes in patients with dementia. There are 91 questions for caregivers about the patient's irritability, agitation, aggression, anxiety, depression, euphoria, inhibition, apathy, aberrant motor behavior, delusions, hallucinations, and sleep and eating disturbances. Higher scores indicate more frequent or more severe behavior problems.
- **Barthel Index.**  
 Measures the level of ADL independence. The score ranges are from 0 to 16.
- **Katz ADL Index.**  
 This test scores independence in six basic functions: bathing, dressing, toileting, transferring, continence, and feeding. The scale range is from -2 to 6.

- Lawton Instrumental ADL Scale (IADL).  
This test measures the ability to live alone. It scores the ability to function in eight areas: using the phone, shopping, preparing food, housekeeping, doing laundry, traveling, preparing and taking medication, and handling finances. The scale range is 0 to 8 for women and 0 to 5 for men.
- Tinetti Balance and Gait Evaluation.  
The scale range for this test is 0 to 14.

The diagnosis of dementia is a clinical one and has two criteria:

- 1) The intellectual impairment must be severe enough to interfere with social or occupational function, and
- 2) Delirium must be ruled out as a cause.<sup>2</sup>

Dementia, delirium, and depression are challenging to sort out. It is estimated that 22% of ambulatory elders with dementia are also experiencing delirium.<sup>4</sup> Attaining a baseline cognitive status on hospital admission is highly important because there is no one marker that differentiates one condition from another. Hospitalization often precipitates delirium. Crisis often triggers behavioral symptoms that indicate a need to assess for underlying dementia. Nurses monitoring and documenting their patients' cognitive status substantiates the diagnostic process.

Become aware of these common pitfalls that lead to un-recognition and/or misdiagnosis of cognitive impairment:

- Dementia may go unsuspected because the patient is alert and socially graceful despite the loss of memory, orientation and judgment.<sup>10, 22</sup>
- Depression may be missed in some because dementia causes them to be unaware and/or unconcerned with new cognitive losses.<sup>10</sup>
- Delirium may go undetected because it takes the hypoactive form characterized by psychomotor retardation, social withdrawal, and drowsiness.<sup>6, 22</sup>
- Delirium is erroneously attributed to worsening of dementia because so many symptoms overlap.<sup>6, 7, 22</sup>
- Delirium is erroneously diagnosed because of fluctuating symptoms prevalent in Parkinson's disease or Lewy body dementia.<sup>7</sup>
- Cognitive impairment is erroneously addressed as the primary problem in an older person who has an asymptomatic infection that goes undetected.<sup>10</sup>

## Issues and Interventions

## Part 1: Communications

Nurses admitting older people to the hospital routinely assess them for cognitive impairment. They then experiment with interventions based upon the assessment findings. However, families and previous caregivers have inevitably already developed effective personalized communication patterns that cannot be categorized.<sup>23</sup> It is highly valuable for you to interview the family and the caregivers to learn about their usual communication with your cognitively impaired patient. This gives you a baseline from which to work, a normalcy the situation allows you to return to later. Some information can be applied immediately, for example using the patient's preferred name, avoiding situations that are known to upset the patient, providing sources of proven comfort to the patient, and observing the patient's usual routines if possible.

However, as this course points out, acute illness, crisis, anesthesia, new medications and the unfamiliar environment of a hospital will all disrupt normalcy. These stressors may interfere by making it difficult for a patient to understand what others are trying to communicate (agnosia) and/or in making it difficult for the patient to express thoughts and feelings (aphasia). The situation may be reversible though. Meanwhile, use the information gained from the family and previous caregivers to apply strategies proven to work in the patient's past.

Communication problems cause a great deal of frustration and this is often expressed in aggression, foul language, resistance to care and constant demands for attention.<sup>24</sup> Engage frustrated patients in projects and tasks to divert their emotional energy.

Reality orientation is a commonly used strategy for people who are cognitively impaired. It involves constant and repetitive verbal and visual clues to keep the patient oriented. Reality orientation strategies improve functional abilities in patients who are stable, medically and emotionally.<sup>25</sup>

Some ways to orient patients are:

- Introduce yourself each time you talk to the patient.
- Point to calendars and clocks frequently in conversation.
- Mention the name of the facility and city you are in.
- Talk about current events and the plans for the day.<sup>14</sup>

Most people think that communication problems associated with dementia correspond to a loss of self-identity. However, studies now show that the personality can survive despite these communication difficulties.<sup>26</sup> When the patient's self-identity is acknowledged by caregivers, disruptive and combative behavior is often dissipated. The challenge for caregivers though, is to take the time to discover what the patient's self-identity is. The individual's history may span over eight decades and be tied into several social and occupational roles.

## Part 2: Acute Care

Cognitive impairment, present on admission or occurring during hospitalization, is a common phenomenon for older people. Acute care nurses frequently manage episodes of delirium in this population. It may be the primary cause of cognitive impairment or it may be superimposed upon dementia.

Manage delirium using these steps:

- Assess and control pain frequently.
- Investigate into hidden causes of delirium.
- Administer treatment for delirium, if ordered.
- Adjust nursing care to include appropriate safety interventions.
- Get a baseline mental status assessment. (Refer to the previous section.)
- Stay alert to likely drug-induced impairment. Monitor and document changes.

Potentially, any drug can cause delirium in older patients but there are some that do it more often. A CDC study revealed that drugs inappropriate for geriatric patients are prescribed almost 8% of the time for outpatients.<sup>27</sup> These are drugs listed on the Beers List and/or the Zhan List. Some of these medications are on the list because the balance between dose and side effects makes them ineffective for most, but not all elders.

Be particularly alert to these primary suspects when delirium occurs:<sup>4, 10, 27, 28</sup>

- Anticholinergics
  - Antihistamines
  - Corticosteroids
  - Cardiovascular drugs
  - Anti-emetics
- Psychoactive drugs
  - Opioid analgesics
  - Antidepressants
  - Benzodiazepines
  - Sedatives & hypnotics
  - Anti-psychotics
- Anticonvulsants
  - Seizure drugs
  - Anti-parkinsonian drugs
  - Anti-spasmodics
- Antibiotics
- NSAIDS

Severe delirium may be treated with haloperidol (Haldol®) or one of the newer anti-psychotics such as risperidone (Risperdal®).<sup>10, 22</sup> These are anti-dopaminergic neuroleptics. Note that they are contraindicated for people with Parkinson's disease or

Lewy body dementia. In delirium cases associated with alcoholism, drug abuse or malnutrition these treatments may be ordered: <sup>13</sup>

- Thiamine.
- Na normalization.
- Mg or P replacement.
- Naloxone (Narcan®) to antidote opioid toxicity.
- Flumazenil (Romazicon®) to antidote benzodiazepine effects.
- Benzodiazepines for delirium tremors associated with alcohol withdrawal.

Care planning for patients with delirium centers around safety. Delirious patients are at high risk for falls and injuries. They must be checked on hourly or kept in full view, monitored frequently for changes, and toileted on a two hour schedule. <sup>7, 13</sup> In addition, they require frequent orientation and can benefit greatly from the presence of family or other guardians.

Pain management of cognitively impaired patients is tricky. Analgesics can either contribute to or resolve delirium. Furthermore, assessing pain in people with dementia is a challenge. They do not experience any less pain than older adults without dementia but have three problems that lower their chances for having it treated. <sup>29</sup> They may not interpret sensations as painful; they may have difficulty recalling pain in the recent past; and they may be unable to tell someone about their pain.

It is estimated that pain is prevalent in 40 to 80% of older patients with dementia. <sup>30</sup> If this pain goes untreated, problems escalate on all levels: emotionally, behaviorally and functionally.

The American Geriatric Society Guidelines have no clear recommendation of specific tools to assess pain in severe dementia or when aphasia occurs. <sup>31</sup> The guidelines suggest to look for behavioral clues after determining a baseline status. This idea is further supported by a study of the Pain Assessment Checklist for Seniors with Limited Ability to Communicate. This tool consists of 24 items covering facial expression; activity and body movements; social, personality and mood indicators; and physiological measures of eating, sleeping and vocalization. The result of the study shows that behavioral symptoms are most statistically significant in assessing pain for seniors with dementia. <sup>30</sup>

Tools currently in use to assess pain are: <sup>29, 31</sup>

- Checklist of nonverbal pain indicators, developed by Feldt.
- Assessment of discomfort in dementia protocol, developed by Kovach.
- Pain assessment in advanced dementia scale (PAIN AD).  
This tool assesses breathing, negative vocalization, facial expression, body language and consolability.
- The numerical rating scale. (0 to 10)
- The verbal descriptor scale.
- The pain thermometer.

- The faces pain scale.

At times, the best indicator of pain comes from the effect of a time-limited trial of analgesic to treat suspected pain.<sup>29</sup> This approach relies on your observation and documentation of consequent behavioral changes. Family members may understandably raise issues surrounding analgesia.<sup>22</sup> They may have strong opinions and feelings about how drugs affect their loved one. In discussions, it may be helpful to make these points:

- Symptoms of agitation, emotional outbursts and other behavioral problems can be interpreted in various ways. It takes time and experimentation to sort it out.
- Neurotoxicity from opioid use may also create agitation. It can lead progress to hallucinations, spasms, seizures and altered pain responses too. Further investigation requiring more time is often necessary to determine precipitating factors for the neurotoxicity.

Dehydration is a common precipitator of delirium and toxicity in the geriatric population. Statistics show that one out of four long-term residents admitted to a hospital are dehydrated.<sup>32</sup> Older people have diminished renal function that lowers their ability to concentrate urine. They do not perceive thirst reliably either. They need to work at developing a habit of drinking at least 1700 ml per day to stay hydrated. Frail elders with low body weight become dehydrated more rapidly than others.

There is no single measure of dehydration but a clinical determination is made from:

- Weight.
- An elevated creatinine level.
- Physical signs of a dry mouth and tongue, and a reduced skin recoil time on the forearm and subclavical region.<sup>32</sup>

Dehydration is corrected through fluid and electrolyte administration. This can be done intravenously or subcutaneously with hypodermoclysis. Hypodermoclysis is a slow restoration of hydration with three liters of fluid administered within 24 hours at two separate sites.<sup>22,32</sup>

Among all hospitalized patients, people with dementia are the most likely to be put in restraints. The primary reason is to maintain life-sustaining treatments such as ventilation or intubation in the ICU. The second reason is to manage behavioral problems such as agitation and aggression that can lead patients to injuries, falls and wandering.<sup>33</sup>

Wandering occurs at some time in most elders with dementia.<sup>34</sup> Hospitalization tends to exacerbate the tendency to wander. Research shows that restraints are not always the answer. They do not prevent falls and injuries and have some negative consequences. Immobilization causes physical de-conditioning. Patients can become more agitated

from being restrained. Together these two consequences raise the risk of falls and injuries.

Current thinking is to prevent injuries from falls, as opposed to preventing falls at any cost.<sup>33</sup> Interpret the patient's behavior to identify unmet needs such as toileting, or changes in health status such as the occurrence of delirium. Make environmental adjustments such as using a night light, keeping the bed height low, placing bumper pads around the bed, and keeping assistive devices handy. Be alert to times when patients with dementia can get into trouble:<sup>33, 35</sup>

- At change of shift times.
- Coming out of anesthesia.
- With the addition or change of medications.
- Late in the day. Patients with dementia often exhibit "sundowning", a state of confusion associated with fatigue and dimmer lighting.

Know where to find your facility's protocol for finding lost patients and notifying police and relatives. If wandering is a regular problem, encourage families to register their loved one with the Alzheimer's Association's "Safe Return Program."

### Part 3: Long-Term Considerations

Families often ask if there is anything that can be done to slow down the progression of dementia, and when institutional care will become necessary. In the early stages of dementia there are four interventional strategies that may help:<sup>2, 11, 16</sup>

- Identify and treat any contributing causes that are reversible, such as delirium and depression.
- Sharpen remaining cognitive abilities with occupational and speech therapy.
- Employ behavioral management techniques aimed toward enhancing ADL function and safety.
- Experiment with cognitive enhancers targeted for Alzheimer's disease patients:
  - Over-the-counter aids such as NSAIDS, Vitamin E and ginkgo biloba.
  - Statins.
  - Cholinesterase inhibitors such as Aricept®, Exelon®, or Reminyl®.
  - Antiglutamatergic treatment, ie. Memantine®.

People with dementia live alone, with their families, and in institutions. Almost half of Americans over age 85 live alone. A third of these have dementia.<sup>36</sup> The average time for people with dementia to live with their families is about seven years. This is followed by about two more years of round-the-clock care in an institution.<sup>5</sup> Disruptive and aggressive behavior is most predictive of the decision for institutional care. A secondary predictor is functional decline, marked by incontinence and increasing dependency needs.<sup>5</sup>

The choice of where the person in question is to live depends on:

- Safety issues.
- The stage of dementia the person is in.
- The financial resources of the individual and family involved.
- The right and decision-making capacity of the person involved.
- The availability and coping capacity of caregivers in the home.

The decision to manage care of a person with dementia at home or place the person in an institution is most often made within the family. Patient rights and even partial decision-making capacity are honored. It is not a matter of legal competence but a clinical decision.<sup>37</sup>

These are some of the factors taken into consideration:<sup>36, 37</sup>

- The health status and needs of the primary caregiver in the family.
- Clinical determination of the capacity of the person in question to make a decision:
  - 1) MMSE scores below 19 indicate severe cognitive impairment, whereas scores above 23 validate adequate cognitive function.
  - 2) Evidence of some degree of executive function must be present on assessment to validate the capacity of the person in question.
- Documentation of indicators of incapacity and safety risk:
  - Wandering.
  - Inability to prepare meals.
  - Taking medications incorrectly.
  - Unsafe activities such as burning pans on the stove or careless smoking.

When a person with dementia lacks decision-making ability it is still possible that they may be able, even in an advanced stage of dementia, to appoint a proxy. State laws vary on who should be a surrogate decision-maker when the patient is incapable and has no proxy appointed.

## **Conclusion**

Adapting nursing care to manage cognitive impairment is more important than ever. Baby boomers are entering their seventh decade of life and represent the largest group of healthcare consumers. Expect one out of four elders coming into the hospital to have dementia at some stage of progression. Expect half of them to also be delirious. Failure to recognize and adjust treatment to cognitive impairment becomes a liability for the patient, the patient's family, healthcare workers, and the facility.

In this course you have learned that cognitive function has several aspects to it. Some abilities are necessary to perform activities of daily living. Others are critical for elders to live alone safely. You have also learned that there is quite a difference in prognosis and appropriate intervention between the three “D’s”, dementia, delirium, and depression. Dementia creeps up slowly and requires severe functional impairment to meet the criteria for a formal diagnosis. When a diagnosis of dementia is made, institutionalization is not an immediate result. The person with dementia may be kept in the family home for up to seven years or more depending on the caregivers’ coping and capacity,

Nurses admitting older patients into the hospital routinely assess patients for cognitive impairment and establish a baseline status. This measure comes from using informal assessment tools assessable online, the patients’ medical records, and interviews with family and previous caretakers. This information is invaluable when applied. It will lower the patient’s frustration, allow for comfort provisions, and direct efforts at keeping patients as oriented as possible.

Older patients are frequently delirious during hospitalization. It is critical for nurses to remain vigilant for the effects of anesthesia and drugs while making pain management a priority. Delirium intensifies nursing care yet there is no proven or simple solution to keep delirious patients safe. As with accommodating for the presence of dementia, interventions that work are those based on assessments that identify individual traits.

## References

1. Maslow, K. & Mezey, M. (2008). Recognition of dementia in hospitalized older adults. *American Journal of Nursing*, 108(1): 40-49.
2. Tabloski, P. A. (2006). *Gerontological Nursing*. New Jersey: Pearson/Prentice Hall.
3. National Institute on Aging. (2007). One in seven Americans age 71 and older has some type of dementia, NIH-funded study estimates. Available online @ <http://www.nia.nih.gov>.
4. Lisi, D. M. (2000). Definition of drug-induced cognitive impairment in the elderly. *Medscape Pharmacotherapy*. 2(1). Available online @ <http://www.medscape.com>.
5. Padgett Coehlo, D.; Hooker, K. & Bowman, S. (2007). Institutional placement of persons with dementia. *Journal of Family Nursing*, 13(2): 253-277.
6. Voyer, P.; Cole, M.; McCusker, J. & Belzile, E. (2006). Prevalence and symptoms of delirium superimposed on dementia. *Clinical Nursing Research*, 15(1): 46-66.
7. Fick, D. & Mion, L. (2008). Delirium superimposed on dementia. *American Journal of Nursing*, 108(1): 52-60.

8. Hartford Institute for Geriatric Nursing, College of Nursing, New York University. (2008). Try this: Best practices in nursing care to older adults series of assessment tools. Available online @ <http://www.nicheprogram.org>.
9. National Guideline Clearinghouse. (2003). Assessing cognitive function. Available online @ <http://www.guideline.gov>.
10. Lang, M. (2001). Screening for cognitive impairment in the older adult. *The Nurse Practitioner: The American Journal of Primary Health Care*, 26(11).
11. National Institute of Neurological Disorders and Stroke. (2007). NINDS dementia information page. Available online @ <http://www.ninds.nih.gov>.
12. WebMD. (2007). Confusion, memory loss, and altered alertness-topic overview. Available online @ <http://www.webmd.com>.
13. Kirshner, H. & Jacobs, D. (2008). Confusional states and acute memory disorders. Available online @ <http://www.emedicine.com>.
14. National Library of Medicine. (2006). Medical encyclopedia: confusion. Available online @ <http://www.nlm.nih.gov/medlineplus>.
15. Cleveland Clinic Foundation. (2006). Stroke and dementia: Is there a correlation? Available online @ <http://www.clevelandclinic.org>.
16. Mayo Foundation for Medical Education and Research. (2007). Dementia: It's not always Alzheimer's. Available online @ <http://www.mayoclinic.com>.
17. Leentjens, A. & Vander Mast, R. (2005). Delirium in elderly people: An update. *Current Opinion in Psychiatry*, 18(3): 325-330. Available online @ <http://www.medscape.com>.
18. Barclay, L. & Desiree, L. (2006). Anticholinergic use in elderly may lead to diagnosis of mild cognitive impairment. *Medscape Medical News*, February 3, 2006. Available online @ <http://www.medscape.com>.
19. Gualtieri, C.T.; Johnson, L.G. & Benedict, K.B. (2006). Neurocognition in depression: Patients on and off medication versus healthy comparison subjects. *Journal of Neuropsychiatry and Clinical Neuroscience*, 18: 217-225.
20. Borson, S.; Scanlan, J.; Watanabe, J.; Shin-Ping, T. & Lessig, M. (2006). Improving identification of cognitive impairment in primary care. *International Journal of Geriatric Psychiatry*, 21: 349-355.
21. Merck & Company, Inc. (2008). Assessment domains. Chapter 4: Comprehensive geriatric assessment. *The Merck Manual of Geriatrics*.

22. National Cancer Institute. (2007). Cognitive disorders and delirium (PDQ®). Available online @ <http://www.meb.uni-bonn.de/cancer.gov>.
23. Miller, C. (2008). Communication difficulties in hospitalized older adults with dementia. *American Journal of Nursing*, 108(3): 59-66.
24. Conederg, F. & Mitchell, L. (2007). Therapeutic activity kits. The Hartford Institute for Geriatric Nursing, College of Nursing, New York University. Available online @ <http://www.hartfordign.org>
25. O'Connell, B.; Gardner, A.; Takase, M.; et al. (2007). Clinical usefulness and feasibility of using reality orientation with patients who have dementia in acute care settings. *International Journal of Nursing Practice*, 13: 182-192.
26. Cohen-Mansfield, J.; Parpura-Gill, A. & Golander, H. (2006). Utilization of self-identity roles for designing interventions for persons with dementia. *Journal of Gerontology: Psychological Sciences*, 61B(4): 202-212.
27. Wood, D. (2004). Elderly receiving inappropriate meds. *Nursezone-Nursing News*. Available online @ <http://www.nursezone.com>.
28. Lippincott Williams & Wilkins. (2004). Medications associated with acute confusion in the elderly/Nursing interventions for acute confusion in the elderly. Wallet card given with *American Journal of Nursing* subscription.
29. Horgas, A. (2007). Assessing pain in older adults with dementia. The Hartford Institute for Geriatric Nursing, College of Nursing, New York University. Available online @ <http://www.hartfordign.org>.
30. Zwakhalen, S.; Hamers, J. & Berger, M. (2007). Improving the clinical usefulness of a behavioral pain scale for older people with dementia. *Journal of Advanced Nursing*, 58(5): 493-502.
31. American Geriatrics Society. (2006). AGS guideline on the management of persistent pain. Available online @ <http://www.americangeriatrics.org>.
32. Faes, M.; Spigt, M. & Olde Rikkert, H. (2007). Dehydration in geriatrics. *Geriatrics Aging*, 10(9): 590-596. Available online @ <http://www.medscape.com>.
33. Evans, L. & Cotter, V. (2008). Avoiding restraints in patients with dementia. *American Journal of Nursing*, 108(3): 40-49.
34. Silverstein, N. & Flaherty, G. (2007). Wandering in hospitalized older adults. The Hartford Institute for Geriatric Nursing, College of Nursing, New York University. Available online @ <http://www.hartfordign.org>.

35. Mayo Clinic Staff. (2007). Sundowning: late-day confusion. Available online @ <http://www.mayoclinic.com>.

36. Lulis, S.A. (2002). Living alone: When is the elder no longer safe? *American Geriatrics Society 2002 Annual Scientific Meeting*. Available online @ <http://www.medscape.com>.

37. Mitty, D. (2007). Decision making and dementia. The Hartford Institute for Geriatric Nursing, College of Nursing, New York University. Available online @ <http://www.hartfordign.org>.

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