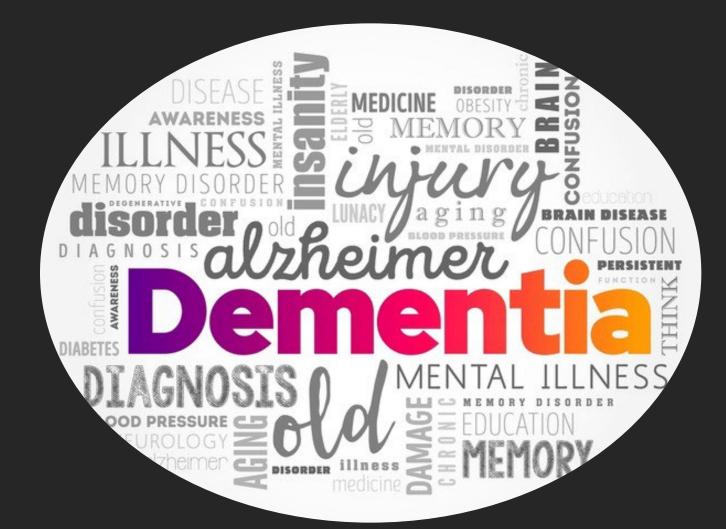
#### DEMENTIA

(major neurocognitive disorder)





#### **DEFINITION**

Dementia is major neurocognitive disorder that is severe enough to interfere with daily life. There is a decline in thinking skills presenting as:

- Difficulty with planning.
- An inability to make decisions.
- Trouble focusing on tasks.
- An inability to remember the names of objects and people.
- Struggles with performing daily tasks.
- Speaking or behaving in ways that are not socially accepted.

Neurocognitive disorder is a general term that describes decreased mental function due to a medical disease other than a psychiatric illness. Neurocognitive disorders are grouped into three subcategories:

- Delirium acute confusional state affecting mainly attention and awareness.
- Mild neurocognitive disorder some decreased mental function, but able to stay independent and do daily tasks.
- Major neurocognitive disorder decreased mental function and loss of ability to do daily tasks - also called dementia.

#### NEUROCOGNITIVE DISORDER



#### **MAJOR VS. MINOR NEUROCOGNITIVE DISORDERS**

Neurocognitive disorders are not developmental; they are acquired. They are caused by brain damage in areas that affect:

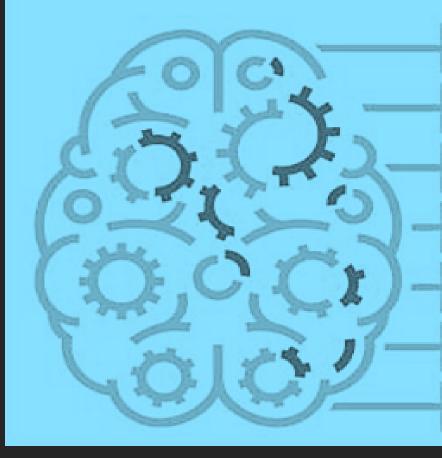
- Learning and memory.
- Planning and decision making.
- The ability to correctly use and understand language.
- Hand-eye coordination.
- The ability to act within social norms, such as dressing appropriately, showing empathy, and performing routine tasks.



Neurocognitive disorders can also affect a person's ability to regulate emotions, especially anger.

When there is only a slight decline in one or more of these functions, the disorder is considered mild. When the decline in one or more of these functions is severe, the disorder is considered major.

### TYPES OF DEMENTIA



ALZHEIMER'S DISEASE

VASCULAR DEMENTIA

LEWY BODY DISEASE

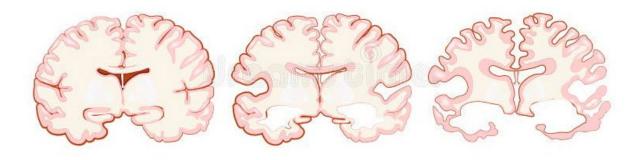
FRONTOTEMPORAL DEMENTIA

PARKINSON'S DISEASE

OTHER (HUNTINGTON'S DISEASE ETC.)

MIXED DEMENTIA

#### ALZHEIMER'S DISEASE



Healthy brain

Mild cognitive difficulties

Severe Alzheimer's disease

Alzheimer's disease is currently thought to be due to a build up of abnormal proteins in and around brain cells. It is the most common type accounting for approximately 40-70% of all dementias. It is gradually progressive.

Early symptoms include:

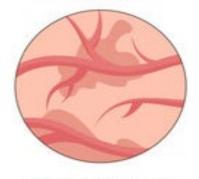
- Memory loss.
- Executive dysfunction (behavioral symptom that disrupts a person's ability to manage their own thoughts, emotions, and actions).
- Aphasia (a brain disorder where a person has trouble speaking or understanding other people speaking).
- Apathy/depression.
- Poor insight.

## VASCULAR DEMENTIA





Normal Blood Vessel



Blood Vessels With Dementic

Vascular dementia is the second most common type accounting for approximately 15-25% of all dementias.

It is progressive, either gradually or step-wise. Factors that increase the risk for vascular dementia include strokes, heart attacks, high cholesterol, hypertension, diabetes, smoking, and alcoholism.

Early symptoms include:

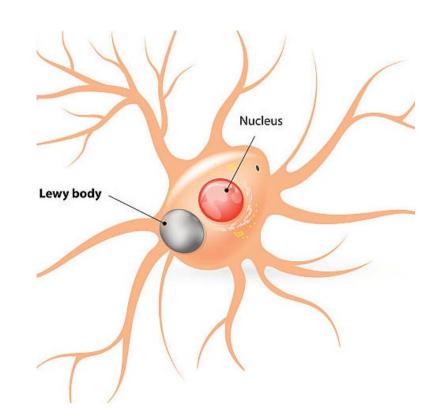
- Slowed thinking.
- Difficulty with problem-solving.
- Loss of focus and organization.
- Memory impairment.

Lewy body dementia (LBD) is a disease associated with abnormal deposits of a protein called alpha-synuclein in the brain. It accounts for up to 20% of all dementias. These deposits, called Lewy bodies, affect chemicals in the brain whose changes, in turn, can lead to problems with thinking, movement, behavior, and mood. It is progressive with fluctuations in symptoms.

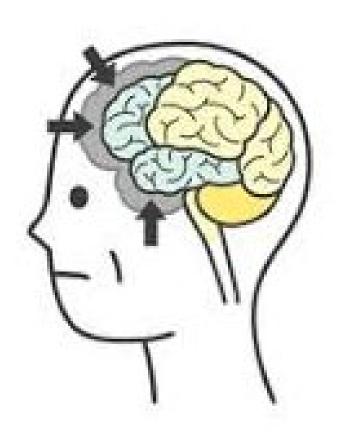
#### Common symptoms include:

- Acting out dreams in sleep.
- Seeing things that aren't there (visual hallucinations).
- Problems with focus and attention.
- Uncoordinated or slow movement, tremor, stiffness.

## LEWY BODY DEMENTIA



#### FRONTOTEMPORAL DEMENTIA



Frontotemporal Dementia is the result of damage to neurons in the frontal and temporal lobes of the brain. This causes the lobes to shrink.

It can strike younger people with symptoms starting between the ages of 40 and 65.

It is rapidly progressive.

Early symptoms include:

- Behavioral issues.
- Personality change.
- Attention problems.
- Problems with judgement.
- Language problems.

#### **MIXED DEMENTIA**

Mixed dementia is a condition in which more than one type of dementia is causing symptoms at the same time.

In the most common form of mixed dementia, it is thought that the abnormal protein deposits of Alzheimer's disease coexist with blood vessel problems linked to vascular dementia.

Mixed dementia symptoms may vary, depending on the types of brain changes involved and the brain regions affected. In many cases, symptoms may be the same or even indistinguishable from those of Alzheimer's or another type of dementia.



#### OTHER DISORDERS LINKED TO DEMENTIA



**Huntington's disease**, caused by a genetic change that causes certain nerve cells in the brain and spinal cord to waste away. Symptoms include a decline in thinking skills. Symptoms usually appear around age 30 or 40.

Traumatic brain injury (TBI) is most often caused by repetitive head trauma. Symptoms depend on the part of the brain that is injured. TBI can cause depression, explosiveness, memory loss and impaired speech as well as slow movement, tremors and stiffness. Symptoms might not appear until years after the trauma.

**Creutzfeldt-Jakob disease,** a rare brain disorder usually occurring in people without known risk factors. It may be passed down from a parent. This condition might be due to deposits of infectious proteins called prions. Symptoms of this fatal condition usually appear after age 60.

Many people with **Parkinson's disease** eventually develop dementia symptoms. When this happens, it's known as Parkinson's disease dementia.

#### **REVERSIBLE DEMENTIA-LIKE CONDITIONS**

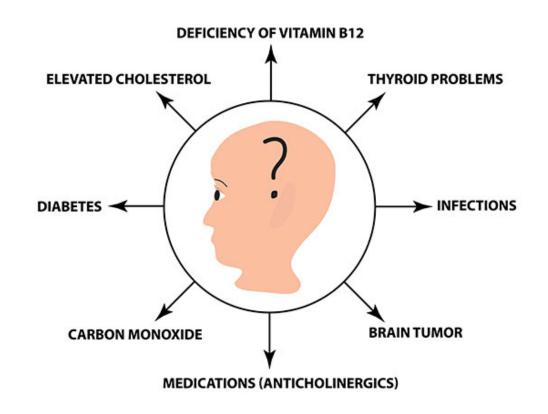
Some causes of dementia-like conditions can be reversed with treatment. These include:

**Infections** due to fever or the body's attempt to fight off an infection.

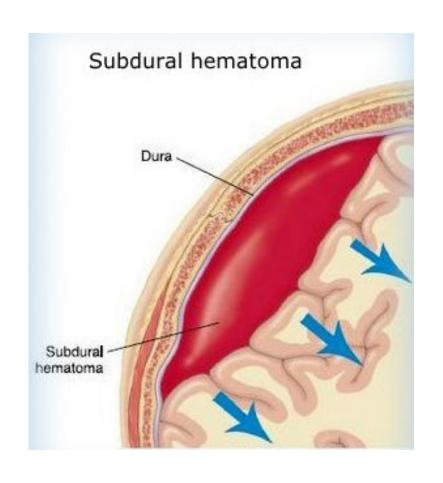
**Immune disorders** such as multiple sclerosis or other conditions in which the body's immune system attacks nerve cells.

**Metabolic or endocrine problems** such as thyroid problems and low blood sugar. Also true for too little or too much sodium or calcium.

Low levels of certain nutrients including thiamine, vitamin B-6 and B-12, copper or vitamin E.

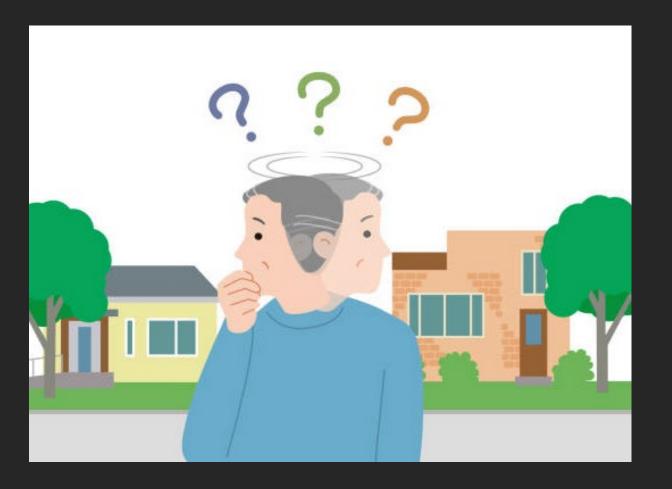


#### **ADDITIONAL CONDITIONS THAT CAN BE REVERSED**



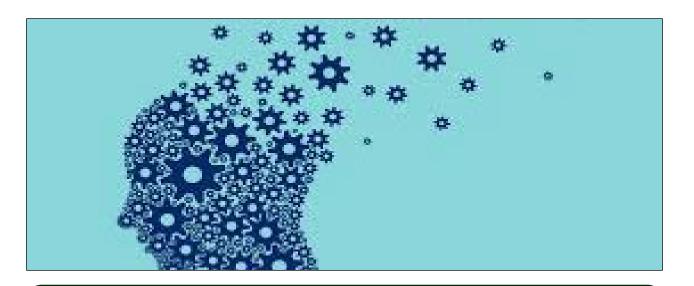
- Medications: side-effects, a reaction to a medication, or an interaction of several medications can cause dementia-like symptoms.
- Subdural bleeding (hematoma): bleeding between the surface of the brain and the covering over the brain can be common in older adults after a fall.
- Brain tumors: if they can be removed.
- Normal-pressure hydrocephalus: a condition due to buildup of fluid in the cavities in the brain known as ventricles. It can result in walking problems, loss of bladder control and memory loss.

## SIGNS AND SYMPTOMS



#### SIGNS/SYMPTOMS

**Dementia** is a condition caused by damage to or loss of nerve cells and their connections to each other. When brain cells cannot communicate normally, thinking, behavior, and feelings can be affected. **Dementia impacts people** differently and can cause different signs and symptoms in everyone.



Some of the most common signs and symptoms of dementia include:

- Memory problems, particularly remembering recent events.
- Increasing confusion.
- Reduced concentration.
- Personality or behavior changes.
- Apathy and withdrawal or depression.
- Loss of ability to do everyday tasks.

#### LOSS OF ABILITY TO DO EVERYDAY TASKS

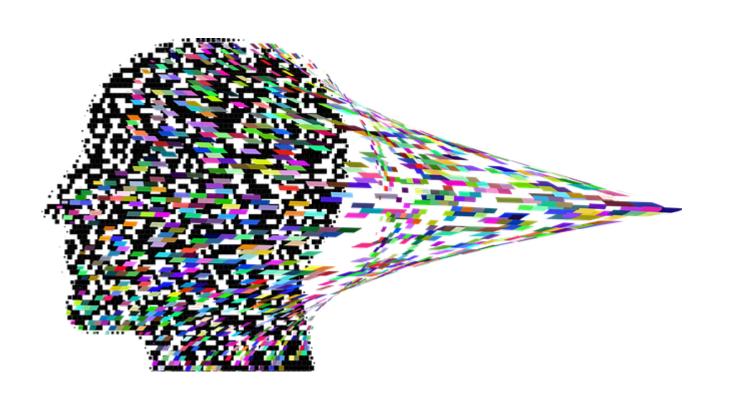
A person with dementia may find it difficult to complete tasks they regularly do, such as changing television settings, using a phone, making a cup of tea, or getting to a familiar location.

They may also find it hard to engage in conversations.

They may forget what they are saying or what somebody else has said, making it difficult to enter a conversation.



#### IDD VS DEMENTIA: WHATS THE DIFFERENCE?



The KEY DIFFERENCE between dementia and intellectual and developmental disabilities (IDD) is the loss of a person's typical level of functioning (their baseline). While some characteristics of dementia and IDD may look the same side by side, it's the loss in an individual's baseline abilities that can point to dementia.

#### **DEMENTIA SYMPTOMS IN PERSONS WITH IDD**

- Increasing problems staying focused.
- Exaggeration of longstanding behavioral traits (most often stubbornness).
- Change in usual daily routine, sleeping, or eating habits.
- Inability to make clothing decisions.
- Getting lost in familiar environments.
- Not remembering names of people.
- Increased aggression and unjustified fears.
- Sleep problems.



# MORE DEMENTIA SYMPTOMS IN PERSONS WITH IDD

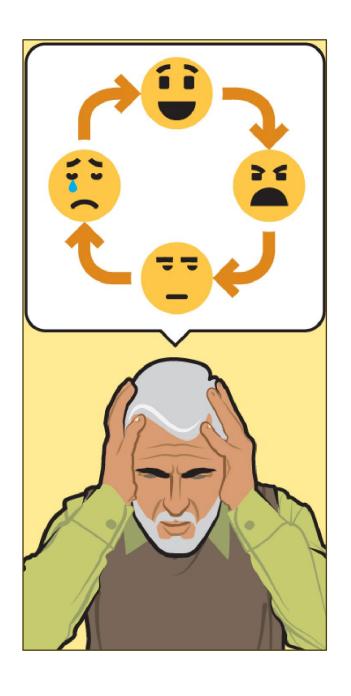




- Increased difficulty with visual/motor coordination.
- Increased accidents and falls.
- Difficulty learning new tasks.
- Loss of language and other communication and social skills.
- Progressive loss of ability to perform activities of daily living.
- Late onset seizures.
- Frequent choking incidents.
- Changes in hearing and vision.

## **BEHAVIOR CHANGES**





#### PERSONALITY/BEHAVIOR CHANGES

Dementia can change a person's personality and behavior.

They may act different than before and say or do things they would not normally.

As brain neurons are lost, behaviors often reflect the parts of the brain that has lost neurons.

For example, the brain's frontal lobe controls humor, initiation, motivation and impulse-control. When damage occurs there, a person may have trouble concentrating or may become impulsive and act out sexually or aggressively.

## BEHAVIOR CHANGES - ANGER, AGGRESSION



Confusion is one of the leading causes of anger in dementia patients. Many factors including physical discomfort, poor communication, and environmental factors can contribute to aggressive behaviors.

If a person is becoming aggressive or having an emotional meltdown, try to determine what factors may be contributing.



#### **CAUSES OF BEHAVIOR CHANGE: HALT-P**

The acronym: HALT-P is helpful when trying to figure out a cause for the change in behavior.



**HUNGRY** 

**ANGRY** 

**LONELY** 

**TIRED** 

In PAIN

#### **APATHY AND WITHDRAWAL OR DEPRESSION**



People with dementia can lose interest in or concern about emotional, social, spiritual or physical life.

They may become depressed and no longer care about activities they used to enjoy.

A person with dementia and depression may feel desperate, yet unable to express sadness in words.

They may develop delusional fears, agitation and withdrawal, or aggressive or suicidal behavior.

#### **HOW MANY?**

About 1 in 5 people with learning disabilities who are over the age of 65 will develop dementia.





## HOW MANY WITH DOWN SYNDROME ARE AFFECTED?

People with Down syndrome have an even higher risk, with about 2 in 3 people over the age of 60 developing dementia, usually Alzheimer's disease.

#### **PREVENTION**

Studies suggest there are ways to reduce the risk for developing dementia.



#### **LOWERING RISKS FOR DEMENTIA**



- Participate in intellectual activities. People who are more highly educated and participate in intellectual activities have better cognitive functioning in old age and may have a lower risk for developing dementia.
- Decrease alcohol use. Evidence shows that excessive alcohol consumption increases a person's risk of developing dementia.
- Stop smoking. There is strong evidence to show that smoking increases a person's risk of developing dementia. Smoking increases the risk of vascular problems which are linked to the two most common forms of dementia, Alzheimer's disease and vascular dementia.

#### **MORE WAYS TO LOWER RISKS FOR DEMENTIA**

Treat hypertension

Long-term research has demonstrated that people who had high blood pressure in mid-life (from 40-64 years of age) were more likely to develop dementia in later life, particularly vascular dementia.



Research shows that type 2 diabetes increases a person's risk of developing dementia. With type 1 diabetes, severe blood sugar highs and lows are also associated with an increased risk of developing dementia.



Having increased cholesterol levels increases the risk for vascular dementia.



Obesity between the ages of 35-65 can increase dementia risk in later-life by about 30%. Obesity is also linked to other dementia risk factors such as hypertension and diabetes.







#### ADDITIONAL WAYS TO LOWER DEMENTIA RISK







**Treat hearing loss.** People who develop hearing problems during mid-life (aged 40–65) have an increased risk of developing dementia. The use of hearing aids has been shown to reduce the risk of dementia to the level of a person with normal hearing.

**Correct vision loss.** Uncorrected vision loss increases a person's risk of developing dementia. The more severe vision loss a person has, the higher their risk of dementia.

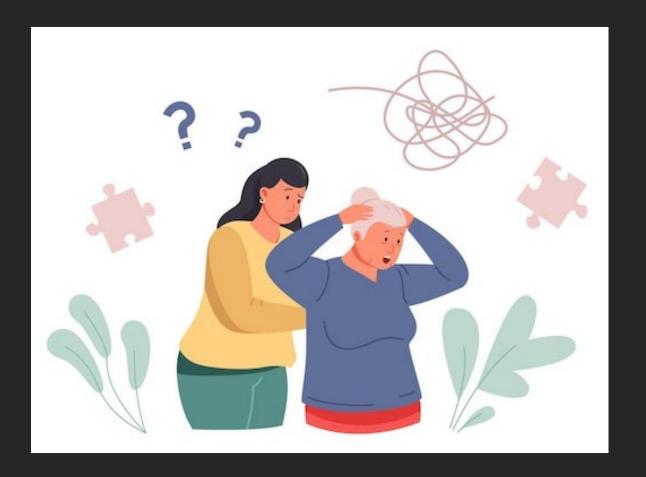
**Prevent head injuries.** A head injury that causes damage to the brain is known as a traumatic brain injury. Repeated or severe traumatic brain injuries may increase the risk of dementia.

**Treat depression.** Depression is associated with an increased risk for dementia.

#### WHAT CAN YOU DO?

Those providing direct care are most likely to notice changes in an individual that may indicate early dementia.

Early intervention increases supports to improve the person's quality of life and may slow dementia progression.



## RECOGNIZING SIGNS AND SYMPTOMS OF DEMENTIA EARLY

Most changes indicating dementia relate to behavior, mood, inability to complete tasks done for years, inability to learn new tasks, and loss of interest in socializing.

These changes will mean that more assistance and support with daily living activities, behavioral management, and health issues will be needed from caretakers.













## RECOGNIZING MEMORY LOSS

Recognizing memory loss allows the individual and care staff to plan for the future.

For example, preparing for home modifications that make it easier and safer for the individual to navigate their residence.

#### PROLONGING INDEPENDENCE

Support the person by continuing to assign daily chores and provide them with responsibilities during the day.

Support the person to continue to engage in normal household activities, even if they need extra support to undertake these.

Support the person to remain as independent as possible with self-care skills, only increasing support to the level it is required.

Support the person to engage regularly with members of the community and to visit favorite places.

Use photos and pictures to help the person to remember their daily schedule.



#### **REDUCE SENSORY STIMULI**



#### Reduce noise levels:

- Try noise cancelling headphones.
- Try to cut out background noise.

#### Clothing:

- Buy loose-fitting, comfortable, easy-to-use clothing, such as clothes with elastic waistbands, fabric fasteners, or large zipper pulls instead of shoelaces, buttons, or buckles.
- Cut tags from clothing as these may be irritating.
- Avoid tight clothing.

#### **MEALTIME**

Dementia affects signals in the brain, and this can affect how some people recognize hunger, thirst, smells or fullness.

Dementia can also affect a person's ability to recognize food, to use cutlery and, in later stages, to swallow.

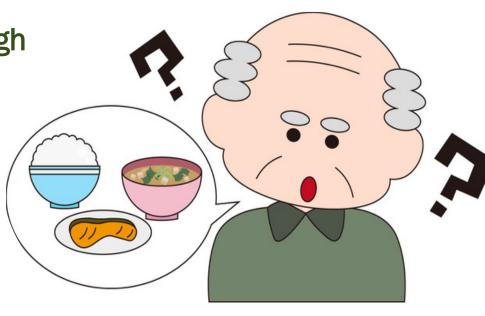
Over time this may mean a person with dementia may not eat or drink enough to support their needs and well-being.

Dementia can alter food preferences. Changes in the brain can result in some people not recognizing certain foods, flavors, smells and textures as in the past.



#### **MEALS**

- Serve meals in a consistent, familiar place.
- Give the person enough time to eat as it may take a person with dementia longer to finish a meal.
- Avoid having too
   much food on a plate
   at any time and allow
   time between courses.



- Sometimes serving only one food item at a time will help as too many choices may be confusing.
- A relaxed and calm environment will help the person with dementia to focus on what they are eating.
- Avoid too much clutter on the table.

### WANDERING BEHAVIOR



Many people with dementia wander away from the home or even wander around inside the home, going into other's rooms.

To limit wandering outside the home and to keep the person safe:

- Keep doors locked if possible.
- Install an alarm that chimes when a door is opened.
- Make sure the yard is fenced with a locked gate.
- Keep shoes, coats, hats, and other signs of departure out of sight.
- Have the person who wanders outside wear an ID bracelet or have some sort of identification inside their clothing.
- Inside the home, use visual cues to help the person recognize their own room and other key rooms.

### COMMUNICATION



### **COMMUNICATION AND RELATIONSHIPS**



- Speak slowly and clearly to the person and maintain good eye contact with them.
- Speak in simple sentences and give the person time to process the language and to respond to you. This does not mean you should talk "baby talk" to them.
- It is important to use their names when speaking. Do not call them "honey", or "sweetie", etc.
- Be patient with the person as they try to remember and to communicate. The person may wish to engage in one topic of conversation frequently.



- VALIDATION is recognition or affirmation that a person or their feelings or opinions are valid or worthwhile.
- It is helpful to see things from the person's perspective.
- Respond to emotions, not words:
  - "I can see how that upset you" versus "Nobody took your stuff."
- Reality therapy does not help. Getting into the person's reality and reminiscing versus reminding is helpful in avoiding behavioral issues.

#### **COMMUNICATION – WHAT TO AVOID**

- Don't reason.
- Don't argue.
- Don't confront.
- Don't remind them they forget.
- Don't question recent memory.
- Don't take it personally.



### 7 THINGS TO AVOID SAYING TO SOMEONE WITH DEMENTIA: 1. "REMEMBER WHEN...?"



- It may be tempting to try jog the person's memory but there is no evidence that prompting someone this way will help them to recall anything.
- It may make the person feel that they are being tested and cause anxiety.
- Instead of posing a question, try leading with '*I remember when*...'. That way, the person can search their memory calmly without feeling embarrassed, then join in if they like.

## 7 THINGS TO AVOID SAYING TO SOMEONE WITH DEMENTIA: 2. "I JUST TOLD YOU THAT"

- People with dementia often pose the same question repeatedly. However, reminding them that they just posed the question will not help them retain the information for the next time they ask.
- Try to remember that the person cannot help repeating themselves. It is important for them to feel heard and understood.
- Answer repeated questions calmly and patiently, with an even tone of voice. If you feel the need, take a break, and remove yourself from the conversation for a while.



## 7 THINGS TO AVOID SAYING TO SOMEONE WITH DEMENTIA: 3. "YOUR BROTHER DIED 10 YEARS AGO."



People with dementia may forget that someone has died. Reminding them that someone has died may be painful and they may react as if hearing it for the first time.

For some people, encouraging them to talk about the person they are asking about can be comforting. Distraction techniques can be useful, although try not to avoid the question if they keep asking, as this can cause anxiety.

Find out how the person is feeling. Sometimes asking about a particular family member or friend is due to the person having an unmet need, such as wanting comfort or reassurance.

## 7 THINGS TO AVOID SAYING TO SOMEONE WITH DEMENTIA: 4. "WHAT DID YOU DO THIS MORNING?"

- Avoid asking too many open-ended questions about the past, as it could be stressful for a person with dementia if they can't remember the answer. It is better to focus on what's happening in the present.
- Instead of asking them about their day, speak briefly about your day and give them time to ask you questions about it. They might then offer information about what they have done.
- Talk to them about the present and use items in the environment such as photos or ornaments to stimulate conversation.



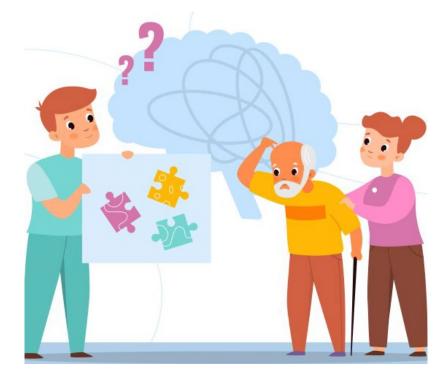
## 7 THINGS TO AVOID SAYING TO SOMEONE WITH DEMENTIA: 5. "DO YOU RECOGNIZE ME?"



- It can be distressing when somebody with dementia doesn't recognize you, especially if you have a close relationship with them.
- Asking the person if they know who you are can make them feel guilty or anxious if they don't remember or offended if they do.
- The way you greet somebody with dementia might change depending on the stage of their condition. A warm hello could suffice, or it may help to say your name and your relationship to them each time.

## 7 THINGS TO AVOID SAYING TO SOMEONE WITH DEMENTIA: 6. "LET'S GET A DRINK NOW, THEN GO FOR A NICE WALK, THEN GET LUNCH AT THAT CAFÉ YOU LIKE IN TOWN."

- Long, complex sentences can be difficult to grasp for somebody with dementia. It's difficult to process several ideas at once as cognitive abilities slow down, so it's better to give directions or instructions one step at a time.
- Use short, simple sentences as much as possible.
- Avoid speaking too much in loud or busy environments and wait until you have the person's full attention before you start.
- During a conversation, give the person enough time to process what you are saying.



# 7 THINGS TO AVOID SAYING TO SOMEONE WITH DEMENTIA: 7. "I'LL JUST HELP YOU USE YOUR LITTLE SPOON THERE, LOVE?"



- "Elderspeak" which can involve talking in a highpitched voice, using words like 'love' or 'deary', and speaking to the person like they are a child - should be avoided. This can be patronizing and infantilizing for a person with dementia.
- Always remember the person behind the dementia.
   It's fine if the person needs you to speak slower than usual but try to keep your tone of voice the same as with anyone else.
- It is usually best to use their name to help keep dignity intact.

### PHYSICAL ENVIRONMENT



### **ADAPT THE PHYSICAL ENVIRONMENT – GENERAL**

- Lighten the walls. People with dementia have an easier time deciphering a room when walls are painted a pale color that reflects light and contrasts with the floor. Busy wallpaper patterns can be confusing.
- Remove mirrors. Wall mirrors, especially large ones, can make a room more difficult for anyone with dementia or low vision to process. Those in cognitive decline will find it difficult to separate what's real from the reflection, which can cause anxiety, confusion, and fear.
- Cover electric outlets using child-proof plastic plug covers.
- Clear surfaces. A minimalist look works best.





## ADAPT THE PHYSICAL ENVIRONMENT - LIGHTING

- People with dementia see the world in an unfamiliar, often confusing, way.
- Everyday observations can be frightening:
  - an oil spot outdoors can be perceived as a hole
  - shadows may be seen as sinister beings
  - an image in the mirror may appear as a threatening stranger
- Strong, low-glare lighting and night lights will help the person see more clearly.
- Arrange lights to minimize shadows.
- Make sure that outside lighting is adequate for safety and minimizes shadows.

## ADAPT THE PHYSICAL ENVIRONMENT – FLOORS

- Keep furniture in each room arranged consistently, don't move items around too often. Someone with dementia may become startled and afraid if the room that they always saw one way was suddenly arranged differently.
- Remove rugs. Carpets and smaller throw rugs with creases or curled edges are fall hazards.

A shiny floor may look like water or ice.
 A person with dementia may refuse to walk on it.



## ADAPT THE PHYSICAL ENVIRONMENT - LIVING ROOM

Use a chair with a raised or adjustable seat that is easy to get in and out of.

 Recliners with motorized lifts can help people who have trouble getting up from chairs and lower them to sit down gradually rather than plopping into a seat.

Put chairs and couches near windows to get natural light.

Put a table beside the chair for books, cups, etc.



### **ADAPT THE PHYSICAL ENVIRONMENT - BEDROOMS**

- Make sure there is plenty of space to move around the room.
- Do not alter where the furniture is placed and remove unnecessary items.
- Install a motion-sensor light that turns on if anyone gets up in the night.



- A room monitoring device would alert staff that the person may have fallen or needs help. This will also alert staff if the person gets up to wander.
- Use wall-mounted reading lights rather than lamps that can be knocked over.
- Round end tables by the bed can help eliminate injuries from bumping against sharp corners.
- Add a chair to help with balance when dressing.

### **ADAPT THE PHYSICAL ENVIRONMENT - BEDS**

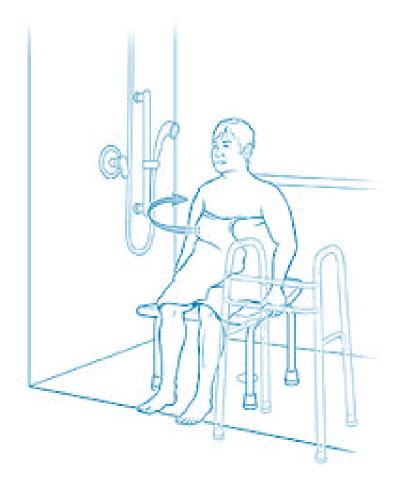
- Use a Hi/Low electric bed if possible:
  - A mattress that sits about knee high can help a person more easily get into bed and touch the floor safely in the morning.
  - Height-adjustable features can facilitate improved healthcare as the caregiver can raise the mattress to waist level for feeding, in-bed bathing, etc., without putting a strain on their bodies.



- A pad by the bed can prevent injury if the person falls out of bed. These often have built in alarms to alert staff if the person has left the bed.
- Use plain bed covers rather than patterns or stripes.
- Use sheets that are a different color from the bedspread and blankets.

### **ADAPT THE PHYSICAL ENVIRONMENT - BATHROOMS**

- Motion activated, touchless faucets can prevent water damage and slippery floors in case a person forgets to turn off the tap.
- Shower chairs are recommended. They should have suction cups on the legs to add stability.
- A handheld shower attachment allows more control over the water and helps rinse off soap better in hard-to-reach places.
- Since dementia can dull sensitivity to heat, temperaturecontrolled water faucets or anti-scald devices, also known as temperature-actuated flow reducers added to existing shower heads will help prevent burns.
- Install grab bars.



### **ADAPT THE PHYSICAL ENVIRONMENT - OUTDOORS**



- Check walkways for cracked pavement and uneven spots.
- Mark doors by placing bright tape or decals at eye level. Impaired vision and perception can make glass doors seem like open space.
- Replace thick welcome mats as they are easy to trip on. Instead, use thin, rubber-backed mats that have edges flush with the ground.
- Upgrade steps: mark edges with neon, glow-in-the-dark tape and fix loose or uneven risers. Install non-skid rubber treads.
- Install handrails on both sides of steps for extra support.



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Jean Justad, MD Medical Director DDP 2024