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## HEARING LOSS AND DEMENTIA

Persons with both hearing loss and dementia experience "double jeopardy" when it comes to communication difficulties because the symptoms of both conditions overlap. Both have a severe affect on quality of life. Both must be treated. It is difficult to determine where hearing loss stops and dementia begins and vice versa. By treating hearing loss, we cannot reduce the symptoms of dementia per se, but we can reduce those dementia-like symptoms which are caused by the hearing loss. The answers to the questions below can help family members and care staff make an informed decision regarding hearing care for the dementia patient.

### CAN HEARING LOSS AND DEMENTIA BE RELATED?

YES- Studies show that the two conditions are often related.

- hearing loss is more prevalent in older adults with dementia
- older adults with dementia are likely to have more severe hearing loss as compared to those without dementia
- the risk of dementia increases as a function of increased hearing loss
- hearing loss affects cognitive function
- cognitive function (i.e. dementia) can affect one's ability to use sound and benefit from aural rehabilitation (hearing and listening treatments)

### DOES HEARING LOSS AFFECT EVALUATION AND DIAGNOSIS OF DEMENTIA?

YES-

- because most cognitive tests used to quantify dementia are given verbally, untreated hearing loss can lower performance on those tests
- when hearing loss has **not** been accounted for or remediated, mis-diagnosis is a concern

### CAN HEARING LOSS CONTRIBUTE TO COGNITIVE DISFUNCTION FOR PERSONS WITH & WITHOUT DEMENTIA?

YES-

- In a University of WA study, it was found that even in a control group without dementia, hearing loss was associated with reduced cognitive function
- when persons with hearing loss are using hearing aids, scores on cognitive function are often improved, suggesting improved mental status with hearing aid use

### DO THE BEHAVIORAL SYMPTOMS OF HEARING LOSS AND DEMENTIA OVERLAP?

YES- there are impressive similarities in terms of psychosocial and cognitive symptoms. Symptoms and behaviors are similar, but the causes differ. {Table taken from Chartrand (2005)}:

#### LATE ONSET ALZHEIMER'S

#### UNTREATED HEARING LOSS

Depression, anxiety, disorientation

Depression, anxiety, social isolation

Reduced language comprehension

Reduced speech discrimination

Impaired memory (esp. short term)

Reduced cognitive input into memory

Inappropriate psychosocial responses

Inappropriate psychosocial responses

Loss of recognition (agnosia)

Reduced mental scores (cognitive)

Denial, defensiveness, negativity

Denial, defensiveness, negativity

Distrust, suspicion of other's motives

Distrust, paranoia

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## SO... WHAT CAN BE DONE ABOUT HEARING LOSS WITH THE DEMENTIA PATIENT?

1. It is important that anyone with suspected dementia receive a complete diagnostic hearing evaluation to determine the impact of possible hearing loss.
2. Hearing loss should be accounted for and remediated in some way during tests of cognitive function. This should improve accuracy of testing. Two options are:
  - a. appropriately fitted hearing aids
  - b. good quality "pocket talker" type personal listening system
3. The patient should have a hearing aid trial to determine whether he/she is able to accept and use amplification.

## CAN DEMENTIA PATIENTS SUCCESSFULLY USE AMPLIFICATION?

ABSOLUTELY- however, it may require some TLC from the audiologist and the care giver to help them learn to accept and appropriately use and care for hearing aids. Audiology Northwest provides:

- in-home appointments: very beneficial to work in the patient's home environment
- weekly (more often if necessary) follow-up appointments during the adjustment phase to be certain of acceptance and benefit
- training for staff and family members as well as the patient
- history of success with dementia patients and hearing aid acceptance

## WHAT IF THE DEMENTIA PATIENT REJECTS HEARING AIDS?

Though hearing aids fitted appropriately for the person's hearing loss is the first line of defense, there are other options can help in defined listening situations when hearing aids are not a possibility:

- "Pocket talker" type personal listening system: small amplifier box with a built-in microphone for the person speaking and wired to a headset for the listener. This can be used for *one-on-one communication* where the talker is in control of the device. Not good for group situations.
- Amplified *telephone*
- Wireless or wired *television* amplification devices using a headset

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***It is important to remember that treatment for hearing loss in the form of sound amplification is just as important for the person with dementia as it is for those without cognitive deficits:***

- ❖ ***consistent improvement in levels of sound input through amplification allows the hearing nerve and the hearing centers in the brain to remain healthy. Without appropriate stimulation the nervous system will atrophy similarly to muscles which are not being used.***
- ❖ ***Improved social interactions with caregivers, friends, neighbors and family members helps to counteract depression, isolation, loneliness, stress, etc. and helps alleviate psychosocial symptoms related to hearing loss.***
- ❖ ***Improvement of cognitive function.***
- ❖ ***Actual symptoms of dementia are still evident; however, those similar and compounding symptoms associated with the hearing loss are decreased. The "double jeopardy" from the combination of conditions is reduced.***
- ❖ ***Improved overall health and quality of life!***