



Alzheimer's Awareness Family Night

HANDOUTS AND RESOURCES

SESSION #5:

Medications, Older Adults, and Alzheimer's Disease

Handout #1: Opening Exercise

Here are three simple questions. Answer the first thing that comes to mind.

1. A man was visiting a mental institution when he asked the director, "How do you determine who needs to be admitted?" The director answered, we fill a bathtub with water and offer the person a teaspoon a teacup and a bucket and ask him to empty the tub." Which would you choose?
2. Say "silk" five times. What do cows drink?
3. If a red house is made from red bricks and a blue house is made from blue bricks and a yellow house is made from yellow bricks what is a green house made from?

We'll talk about this when class begins.

Handout #2: No-Pressure Quiz

- 1. Older adults need their medications and other products used to treat various ailments evaluated approximately every six months to prevent adverse interactions. Which of the following is LEAST likely to need to be evaluated?**
 - a. Prescription medications, drops, ointments
 - b. Over the counter medications, drops, ointments
 - c. Lipstick and face powder
 - d. Vitamins and dietary supplements
 - e. Health food store products including anti-aging creams

- 2. All of the following are common reasons older adults are at risk for adverse drug reactions EXCEPT:**
 - a. Drug dosages are commonly developed based on recommendations for healthy young males
 - b. They absorb, metabolize and eliminate drugs at different rates than younger people
 - c. For many reasons, older adults may not accurately follow the directions for taking their meds
 - d. They tend to take multiple medicines
 - e. They pay more attention to diet and exercise than their medications

- 3. People are said to be noncompliant if they willfully fail to take their prescribed drugs as directed.**
 - a. True
 - b. False

- 4. The following are examples of nonadherence:**
 - a. They are worried about the cost of their medicines
 - b. They are confused by what to take when and don't want to admit it
 - c. They start taking fewer pills because they don't like the side effects
 - d. B only
 - e. A and C only

- 5. All of the following are important reasons to become an advocate for people with Alzheimer's disease who are taking various medications, EXCEPT:**
- When they are in pain, they can seldom ask directly for medicine
 - Without your intervention they may become addicted to pain meds
 - They may not recognize that their diarrhea is a possible side-effect of a medication
 - Since they already have a diagnosis of Alzheimer's disease, others may not recognize a sudden increase in confusion as a possible drug side effect
 - Their loss of sense of time puts them at risk for failing to take medication or taking pills too often
- 6. The two most common risk factors for Alzheimer's disease are increasing age and certain genetic factors. Not everyone who gets old will develop AD, but everyone with those genetic risk factors will.**
- True
 - False
- 7. Current research on the cause or causes of Alzheimer's disease involves studying various other diseases, including:**
- Diabetes
 - Heart disease
 - Arthritis and other inflammatory diseases
 - All of the above
 - A and B only
- 8. Currently, five drugs have been approved by the Food and Drug Administration (FDA) for the treatment of Alzheimer's disease. Only two of them actually stop the progression of the disease.**
- True
 - False
- 9. People who take dietary supplements such as Ginkgo Biloba or Omega-3 Fatty Acids should do so only under the supervision of their physicians because:**
- Dietary supplements are not well-regulated for safety and effectiveness
 - Composition varies among different brands
 - Side effects and interactions with other drugs can be harmful
 - All of the above
 - A and C only

10. Not all treatments for Alzheimer's disease are related to taking medicine. While all of the following are helpful, which of the following is likely to be LEAST beneficial in preventing or delaying AD?

- a. Pleasant social interaction with family and friends
- b. Eating a healthy diet
- c. Waiting to begin an improved lifestyle after retirement when you have time to devote to it
- d. Getting regular exercise
- e. Keeping your brain active with mentally stimulating activities

Handout #3: Important Points and Resources

A summary of the discussion

Many pills, many pains

As they age, many, if not most, older adults rely on a variety of pills, ointments, creams, salves, eye drops, nasal sprays, herbs, vitamins, and dietary supplements. This frequently means they may be at risk for:

- Adverse interactions
- Taking incorrect dosages
- Using medications after their expiration date
- Continuing to use medications that are no longer appropriate

Thus, it is not just *physical* conditions that older adults need to worry about, but also the products they are taking to *alleviate* those conditions.

Most drugs are tested on young, healthy males in their twenties. Older adults absorb, metabolize, and eliminate medicines from their bodies at different rates than do younger people, and they usually require lower dosages of most drugs.

Furthermore, older adults frequently have multiple conditions for which they are taking medicine.

To detect possible negative interactions, older adults need semi-annual evaluation of all the products they use to treat their conditions. This includes prescription and OTC meds, drops, creams, salves, supplements, and any unusual dietary items used regularly. They should also provide all their physicians and emergency contacts with a current list of the items and dosages.

Non-compliance vs. nonadherence

Most older adults take multiple medications, and physicians are often frustrated by patients who fail to take those drugs as prescribed.

- Patients are called *noncompliant* when they *unintentionally* fail to follow the instructions of doctors or pharmacists.
- *Nonadherence* is a *deliberate choice* made by patients to go against the physician's wishes.

But there are many reasons for both.

People may be *noncompliant* because of vision or hearing deficits, undetected memory loss, or poor English skills that can cause confusion and misunderstandings.

Older adults may be *nonadherent* for any combination of issues like financial concerns, denial of need, unpleasant side-effects that cause them to stop taking a medication, poor attention to explicit directions, premature cessation of the medication, fear of addiction, or lack of motivation.

Even properly taken medications can have adverse reactions if they mix poorly with other medications or foods.

What to ask the doctor

When a new medicine is prescribed for you or your care receiver, ask these questions before leaving the doctor's office:

- What is the name of the medicine? What is it for?
- How often, when and with what (food, water?) should I take the medicine?
- Are there any risks for me in taking this medicine with my other medicines (prescribed and over the counter)?
- How will I know it is working? How soon am I likely to notice? How long must I take it?
- What side effects are likely and which ones should I be concerned about?
- What if I miss or forget a dose?
- Should I avoid any foods, drinks, other medicines, dietary supplements, or activities while taking this medicine?

If needed and possible, get directions in large print or translated into your primary language.

Be an advocate

When people have Alzheimer's disease, they can seldom verbally express their discomfort with a medication, so it is up to us to give them a voice by making sure they get the right medications and by watching for sudden changes in behaviors or conditions that may indicate adverse reactions:

- Dry mouth, nausea, vomiting, diarrhea, skin rashes
- Involuntary tics such as sticking out one's tongue (tardive dyskinesia)
- Increased balance and movement problems
- Increased confusion

The Long Road to Cause, Cure, and Prevention

Research indicates that genetic, environmental, and lifestyle factors work together in some way to trigger the disease and cause it to progress, but:

- Discovering the cause of a complex condition like Alzheimer's disease is a challenging task.
- Factors that contribute to developing Alzheimer's disease vary by individuals.
- Certain genetic markers and increasing age are the two highest risk factors for Alzheimer's disease, but do not guarantee that a person will be affected.
- Heart disease, diabetes, and inflammatory diseases are some of the conditions being studied for their potential relationships to AD.

Interestingly, many diseases for which we know neither cause nor cure can still be effectively treated. With each passing year, we are getting better at treating Alzheimer's disease.

The U.S. Food and Drug Administration (FDA) has approved five drugs to treat its cognitive symptoms. Four of them are cholinesterase (KOH-luh-NES-ter-ays) inhibitors, intended to prevent the breakdown of acetylcholine (a-SEA-til-KOH-lean). Acetylcholine is a chemical messenger that helps connect the brain's nerve cells and is important for learning and memory. These drugs are prescribed for the treatment of mild to moderate AD to help delay symptoms or prevent them from becoming worse for a limited time.

The cholinesterase inhibitors (in the order they were approved by the FDA) are:

- Cognex® (tacrine). (Cognex® is no longer actively marketed by the manufacturer.)
- Aricept® (donepezil)
- Exelon® (rivastigmine)
- Razadyne® (formerly known as Reminyl®) (galantamine),

The fifth drug currently approved by the FDA is Namenda® (memantine), which works by regulating the activity of glutamate, a different chemical messenger involved in learning and memory. It was approved in 2003 for treatment of moderate to severe Alzheimer's disease and has benefits similar to the other four drugs.

Progress being made:

- Relationships between AD and other diseases are being studied. Treatments for those diseases (such as heart disease and diabetes) may prove to be helpful in treating AD
- Clinical trials for many new AD drugs are underway.
- Easier to use forms of current drugs are also being developed (e.g., the Exelon® patch currently available).

There are things you CAN do

- Some studies indicate that people who begin healthy habits relatively early in life, such as keeping their brains positively stimulated, will have less likelihood of developing AD later in life. That stimulation does not have to be complex. One study showed that reading the newspaper and playing puzzles and games were simple things that helped.
- A healthy lifestyle – eating well, getting adequate rest and exercise – are beneficial in preventing many ailments.
- Research has shown that positive social interactions – getting together with family and friends – have tremendous benefits for both caregivers and care receivers. That's an option anyone can embrace.

A resource list

Statistics related to the consequences of the improper use of medications by older adults came from the Medscape Fact Sheet "Prescription Medication Use by Older Adults" (http://www.medscape.com/viewarticle/501879_print).

Other websites used for this session included:

- <http://www.merck.com/mmpe/sec20/ch305/ch305a.html> ("Adverse Drug Reactions")
- <http://www.fda.gov/cder/consumerinfo/medAndYouEng.htm> ("Medication Use and Older Adults" and "Aging and Health: You and Your Medicines")
- <http://www.healthanddna.com/adversedrugreactions.html> ("Adverse Drug Reactions")
- <http://www.healthsquare.com/fgpd/fg4ch23p3.htm> ("Drugs and the Elderly")

However, your physician or pharmacist is likely to be able to provide much more useful and specific information than you can analyze in a quick web search, and you are urged to contact him or her with your concerns.

Additional information on adverse drug reactions came from the teaching notes of Kathy Laenhue, M.A., (laenhue@msn.com) for the University of South Florida (Tampa) course: Physical Changes and Aging (GEY3601).

The material used as background for all the information on Alzheimer's disease came entirely from the wonderfully informative and reliable website for the Alzheimer's Disease and Education Resource Center (ADEAR) which can be found at <http://www.alzheimers.nia.nih.gov>. Look under publications, and then under the headings "causes," "diagnosis," and "treatments." Information on the Rush Memory and Aging Project came from the June 13, 2007 article "Study Finds Mix of Disease Processes at Work in Brains of Most people with Dementia" at that same website.

The mailing address for the ADEAR Center is PO Box 8250, Silver Spring, MD 20907-8250, and the toll-free phone is 1-800-438-4380. Single copies of most ADEAR publications are free, and many are downloadable as pdf files.

The site also has more information about the various drugs currently available for treating Alzheimer's disease; you can also learn more by typing the name of the drug into the Search line to bring up the name of the company that distributes it.

