

Module 7: Special Circumstances

*Resident Refusal of Medications
Adverse Drug Reactions
Medication Errors*

Assisted Living Medication Training



RESIDENT REFUSAL OF MEDICATIONS

No resident can be forced to take any medication, but steps should be taken to avoid missed or refused doses of medications and related adverse outcomes. Furthermore, if a resident continually refuses medication he/she should be re-evaluated to ensure appropriate retention.

When a resident refuses a medication the prescribing physician should be notified for further instructions, and documentation should be made in the resident's record.

Although a resident has the right to refuse treatment or care (including medications) at any time, this does not mean there is nothing a Med Aide can do to avoid refusal. If a resident refuses a medication, try to determine the reason for refusal and take appropriate actions. The following is a list of common reasons for refusal with interventions/responses to consider.

REASON FOR REFUSAL	INTERVENTION
Pills are difficult to swallow.	Request a liquid if available. See guidelines for crushing of medications.
The side effects are too disruptive or severe.	Consult MD for a different medication or different dosing schedule.
Manipulative behaviors, this may be the resident's way of gaining control or power.	Allow greater resident control in other areas and with other decisions.
The resident is agitated, or confused.	Reattempt several minutes later, do not draw attention to the issue. Remove environmental distraction such as noise or other residents.
The resident was not informed of changes to his/her medication regimen. (e.g., "Why am I getting a blue pill instead of my two white ones?")	Discuss medication changes with your residents in advance.



ADVERSE DRUG REACTIONS

Medications can have a profoundly beneficial impact on the health and wellbeing of your residents. However, while medications can be helpful, they can also be harmful. The potentially dangerous effects of medications are referred to as adverse drug reactions. Adverse drug reactions can take many different forms from mild headaches or upset stomach to death.

According to the U.S. Food and Drug Administration (FDA):

"An adverse drug reaction, also called a side effect, is any undesirable experience associated with the use of a medicine in a patient. Adverse events can range from mild to severe. Serious adverse events are those that can cause disability, are life-threatening, result in hospitalization or death, or are birth defects."

All residents should be monitored for signs of adverse drug reactions. Some things to watch for include:

- fatigue
- constipation or diarrhea
- confusion
- incontinence
- frequent falls
- depression
- weakness or tremors
- excess drowsiness or dizziness
- agitation or anxiety
- decreased sexual behavior
- orthostatic hypotension (dizziness when standing due to a drop in blood pressure)

If you suspect a resident is experiencing an adverse drug reaction alert the physician immediately. If it is an emergency, call 911.

Drug-Drug Interactions

One type of adverse drug reaction is a drug-drug interaction. A drug-drug interaction occurs when the effect of one drug is altered by the presence of another drug in the body. For example:

- One drug might reduce or increase the effects of another drug.
- Two drugs taken together may produce a new and dangerous interaction.



- Two similar drugs taken together may produce an effect that is greater than would be expected from taking just one drug.

Prescription drugs can interact with each other, for example:

- Mixing antidiabetic medication (e.g., oral hypoglycemics) and beta blockers (e.g., Inderal) can result in the decreased response of the antidiabetic drug and increased frequency and severity of low blood sugar episodes.
- Mixing antidiarrheal medication (e.g., Lomotil) and tranquilizers (e.g., Transxene, Valium), sedatives (e.g., Dalmane, Quaalude), or sleeping pills (e.g., Amytal, Nembutal, Seconal) can result in an increased effect of tranquilizers, sedatives, or sleeping pills.
- Mixing antihypertensive medication (e.g., Reserpine, Aldoril, Combipres) and digitalis (e.g., Lanoxin) can result in abnormal heart rhythms.
- Mixing anticoagulants (e.g., Coumadin, Warfarin) and sleeping pills (e.g., Nembutal, Amytal, Seconal) can result in decreased effectiveness of the anticoagulant medication.

In addition to prescription medications, over-the-counter medications can interact with each other. Some examples include: Taking a cough medication with alcohol at the same time as an antihistamine medication can increase drowsiness and decrease alertness. Mineral oil taken with fat-soluble vitamins (A, D, E, K) can decrease the absorption of the vitamins.

In addition to interacting with each other, over-the-counter medications can also interact with prescription medications. Some examples of this type of interaction include:

- Aspirin can significantly increase the effect of blood thinning drugs (anticoagulants), thus increasing the risk of excessive bleeding.
- Antacids can cause blood-thinning drugs (anticoagulants) to be absorbed too slowly.
- Antacids can interfere with drug absorption of antibiotics (i.e., tetracycline), thereby reducing the effectiveness of the drug in fighting infection.
- Antihistamines, often used for allergies and colds, can increase the sedative effects of barbiturates, tranquilizers, and some prescription pain relievers.
- Decongestants in cold and cough medications can interact with diuretics or "water" pills to aggravate high blood pressure.
- Iron supplements taken with antibiotics can reduce or stop the ability of the antibiotics to fight infection. (The chemicals in the supplement and the antibiotic bind together in the stomach, instead of being absorbed into the bloodstream.)
- Salt substitutes can interact with "water" pills or blood pressure medication to increase blood potassium levels. This can result in symptoms of nausea, vomiting, muscle cramp diarrhea, muscle weakness, and cardiac arrest.



These are just a few of the many interactions that can occur when multiple medications are taken together. Check with the doctor or pharmacist to make sure the resident's medications do not have the potential to interact.

Drug and Food Interactions

When drugs and certain foods are taken at the same time they can interact in ways that diminish the effectiveness of the ingested drug or reduce the absorption of food nutrients. Additionally, vitamin and herbal supplements taken with prescribed medication can result in adverse reactions. Some examples of how foods and drugs can interact include, but are not limited to:

- Food can speed up or slow down the action of a medication.
- Drugs can impair absorption of vitamins and minerals in the body.
- Drugs can stimulate or suppress appetite.
- Drugs may alter how nutrients are used in the body.
- Herbs may interact with anesthesia, beta-blockers, and anticoagulants.

The impact of food-drug interactions will depend on a variety of intervening factors. For example:

- The dosage of the drug.
- A person's age, size, and state of health.
- When the food is eaten and when the medication is taken.

Avoidance of drug interactions does not necessarily mean avoiding drugs or foods. In the case of Tetracycline and dairy products, these should simply be taken at different times, rather than eliminating one or the other from the diet. Having good information about the medications your resident takes and timing your medications around their food intake can help to avoid drug and food interaction problems.

Drug Allergies

Residents may have a drug allergy to a medication. It is important to remember to ask about drug allergies and communicate this information to the pharmacy and physician. A drug allergy can develop even to a medication the resident has taken successfully in the past.

Reactions may begin with mild symptoms that can quickly decline to severe symptoms such as difficulty breathing or shock. Always consider any allergic reaction to be potentially life threatening.



Reasons for Increased Risk

Drugs are more likely to cause problems in older people for three main reasons: (1) the aging body processes drugs differently, (2) certain drugs affect the aging body differently, and (3) seniors typically take more medications than younger adults.

Changes due to aging itself affect how the body processes drugs. For example, the amount of water in the body decreases and the percentage of body fat increases. These changes are important because some drugs dissolve in water and others dissolve in fat. Drugs that dissolve in fat tend to accumulate in the body of the older adult because there is relatively more fat in which to store them.

Changes in the kidneys and liver also affect how the aging body processes drugs. The liver chemically alters (metabolizes) many drugs. It activates some drugs, inactivates others, and prepares many drugs to be eliminated from the body. Most drugs are eliminated from the body by the kidneys in urine. As people age, the liver is less able to alter certain drugs, and the kidneys are less able to eliminate drugs.

All of these changes tend to make certain drugs (but not all) stay in an older person's body much longer than they would in a younger person's body. As a result, the drug's effects continue for a longer time and may be stronger. The risk of side effects may also increase. For these reasons, older people often need to take smaller doses of certain drugs or sometimes fewer doses a day.

Drug Information and Warnings

The FDA, drug manufacturers, and dispensing pharmacies work together to ensure that important information about medications and potential adverse drug reactions is made available to those taking a particular medication. The FDA describes the following examples of these warnings:

- **Medication Guides**
Medication Guides are paper handouts/pamphlets that are required to be distributed to patients with certain medications by the pharmacist. Medication Guides convey risk information that is specific to particular drugs and drug classes, and they contain FDA-approved information that can help patients avoid serious adverse events.



- **Consumer Medication Information**
Compared to a Medication Guide, a Consumer Medication Information (CMI) sheet offers broader information on how to use a medicine. CMI sheets are not developed or regulated by FDA. These information sheets are prepared by pharmacies and given out with prescription drugs. CMI sheets are not available on the FDA Web site. The sheets help consumers understand key information about their prescription medicine, including how to take it, how to store it, and how to monitor their treatment. The sheets also include information on precautions and warnings, as well as symptoms of serious or frequent adverse events and what to do if you experience one.
- **Prescription Drug Labeling**
Drug labeling, commonly called the package insert or the prescribing information, provides information to the physician about what a prescription medication is supposed to do, who should and should not take it, and how to use it. Labeling also includes information on a drug's side effects and warnings, and information from the clinical trials of the drug. Some prescription drug labeling also includes a part that describes the prescribing information in words that consumers will understand.
- **Nonprescription Drug Label ("Drug Facts")**
For an over-the-counter (OTC), or nonprescription medicine, information printed on the medication bottle or package under the heading Drug Facts is important for taking care of yourself and your residents. The Drug Facts tell you what a medicine is supposed to do, who should or should not take it, and how to use it.
- **Black Box Warnings**
A "black box warning" may appear on a prescription drug's label and is designed to call attention to serious or life-threatening risks. Watch for this warning on your residents' medication containers, and contact the dispensing pharmacy or prescribing physician if you have any questions or concerns.



MEDICATION ERRORS

Medication errors can occur in the assisted living community, just as they can occur in the hospital and other healthcare settings. However, medication errors can be prevented by following appropriate medication management policies and procedures. Medication errors tend to occur when the staff member administering them is in a hurry or is not paying close attention to what he/she is doing.

A medication error is defined as any violation of the "Six Rights." Examples may include, but are not limited to:

- Giving the wrong medication
- Giving too much of a medication
- Not giving enough of a medication
- Giving a medication at the wrong time
- Not giving a medication at all
- Giving a medication to the wrong resident

Causes of Medication Errors

Recent research on medication errors in assisted living has shown that the most common error is giving a medication at the wrong time (i.e., outside the "2-hour window") allowed for most medication administration. There can be many things that lead to a medication error, some examples include:

- Hurrying to get medications passed in a short period of time can cause medications to get missed and not given.
- Preparing all the medications for several residents at one time can lead to confusion and errors such as giving a medication to the wrong resident.
- Preparing medications without proper lighting can make it difficult to read labels.
- Preparing medications in a cluttered area can lead to confusion and errors.



Preventing Medication Errors

There are many things a Med Aide can do to avoid medication errors. These practices include:

1. Follow the Six Rights.
2. Always read the label three times.
3. Question the use of multiple tablets to provide a single dose of medicine.
4. Question any change in the color, size, or form of medication.
5. Beware of or look up trade and generic names.
6. Refer to medication reference materials before giving an unfamiliar or new medication.
7. Avoid giving medications prepared by another person.
8. Always prepare medications in a quiet, well lit place.
9. Follow the Six Rights with each medication you prepare.
10. Follow existing medication administration policies and procedures.

If a Medication Error Occurs

1. Do not panic and do not be embarrassed.
2. Do not try to "fix" a missed dose by giving a medication at the wrong time.
3. Do not attempt to remedy the situation on your own. Contact your supervisor/nurse immediately.
4. Contact the prescribing physician or authorized prescriber to inform him/her that a medication error has occurred. Be sure to inform the prescriber of the name of the resident, the name of the medication, and what kind of error occurred (i.e., too much, wrong medication, etc.)
5. Carefully follow whatever instructions the prescriber gives you.



6. Follow your community policy regarding notifying the resident's responsible party.
7. Carefully document the medication error, including what the prescriber told you to do, the condition of the resident, and your actions.
8. Assist your supervisor in completing an Incident Report.
9. If the medication error causes an emergency situation contact 911 before doing anything else.

