# Self-Administration of Medication



ach year approximately 1 million-3 million people in the United States are hospitalized because of the adverse effects of self-administered medication, and 140,000 of them die from a lethal reaction. Staggering numbers!

Unnecessary deaths! Even a common drug like aspirin can cause stomach bleeding or a severe allergic reaction in some people. A little selfknowledge can prevent these hospitalizations and, more importantly, may save your life.

The responsibility for preventing these occurrences lies in the hands of the patient and the health care professional who prescribes these medications. Self-medication is used in this Patient Handout in the broad sense of taking over-the-counter (OTC) medication and being prescribed a medication by a health care professional.

Always ask for written information about any medication that has been prescribed for you when you are visiting the doctor. Or, if possible, bring a family member with you to validate the information you receive, as you may be too sick or too distracted to retain these instructions. When purchasing OTC medications, always read the insert for vital information and check with the pharmacist or health care professional for the efficacy of these remedies. Don't always believe the advertisements for OTC drugs.

## WHAT IS A DRUG?

Any substance other than a food or a device intended for use in the diagnosis, cure, relief, treatment or prevention of an illness, or any substance that may affect the structure or function of the body, can be defined as a drug.

Drugs fall into two categories: prescription and nonprescription. Prescription drugs are those ordered by a doctor with an expected follow-up visit to determine how well they are working. After years of use under prescription regulations, drugs with excellent safety records may be approved for OTC use. Then the patient decides what he needs for a headache, cold or muscle aches.

## NAMES OF DRUGS

Drugs have three names — a chemical, a generic and a trade or brand name. The chemical name describes the chemical composition of a drug. The generic name is assigned by an official agency and the trade name is one that is chosen by the pharmaceutical company that manufactures it. It is a good idea to know the generic and brand name for any drug you are taking or may be allergic to. Often the names are used interchangeably and it can be confusing.

# TYPES OF ROUTES OF DRUGS

Drugs come in all sizes and shapes, and different types of drugs are prescribed and taken for different medical conditions. If you have an infection you are likely to be prescribed an antibiotic. For high blood sugars you may receive insulin. Antihistamines are a type of drug that may be prescribed for allergies.

Most drugs can be taken orally, or by mouth. But there are many effective ways to get a drug into the body, such as under the tongue (the drug dissolves in the mouth rather than in the stomach and is much more rapid-acting), by injection or placed on the skin topically. These are just a few ways a drug can be prescribed and used. Never attempt to take a drug prescribed by one route any other way. It will not work and may cause irreparable harm.

Know the usual dosage of a drug you are taking. All drugs should have a measure of the drug on the label and instructions on how much, when and how to dose. Know how to proceed if you skip a dose. Ask your health care professional what to do if this happens.

# EFFECTIVENESS AND SAFETY

Unwanted drug effects, called side effects or adverse reactions, can occur with any drug and may range from a mild rash to severe respiratory or cardiac arrest. Considering that we are all different, the reactions may vary from person to person. That is why it is not good to share medications. It is extremely important to communicate with your doctor about other drugs you may be taking and any allergies you may have. Even food can interact with some drugs and cause unwanted reactions Alcohol is a drug that interacts with other drugs negatively. For example, OTC antihistamines can cause drowsiness. Alcohol may double this reaction and cause extreme and dangerous sleepiness when driving or operating other machinery.

## OVERDOSE/ADDICTION POTENTIALS

Any drugs can be taken in excess. More does not mean better. Be aware of how much is too much and act accordingly if a toxic dose is ingested. You can find information on any package insert or ask your health care professional for advice. Some drugs have the potential for becoming addictive.

# SPECIAL NEEDS

In addition to the above, there are classifications of subgroups, including the elderly, pregnant women and children, who need special consideration. Dosage calculation and special administration are of vital importance in these groups.

### Reference

Berkow, R., et al. (Eds). (1997). Merck manual of medical information. Whitehouse Station. NJ: Merck and Co.

#### Resource

Rybadki, J., & Long, J. (2001). MD essential guide to prescription drugs, New York: HarperCollins, Publishers.

Compiled by Stella Koslosky, a free-lance writer and author who holds a master's degree in health care administration and is a certified diabetic educator living in Ocean City, MD.

