chapter 4

Health Promotion, Health Maintenance, and Home Health Considerations

evolve

http://evolve.elsevier.com/Wold/geriatric

Objectives

1. Describe recommended health-maintenance practices, and explain how they change with aging.
2. Discuss the relationship of culture and religion to health practices.
3. Identify how perceptions of aging affect health practices.
4. Describe how health maintenance is affected by cognitive and sensory changes.
5. Discuss the impact of decreased accessibility on health-maintenance practices.
6. Describe methods of assessing health-maintenance practices.
7. Identify older adults who are most at risk for experiencing health-maintenance problems.
8. Identify selected nursing diagnoses related to health-maintenance problems.
9. Describe nursing interventions that are appropriate for older adults experiencing alterations in health maintenance.
10. Discuss the role of home health as it relates to health promotion and health maintenance in the elderly.
11. Differentiate between unpaid and paid home health care providers.
12. Identify the factors to consider when seeking home health care assistance.

Key Terms

health maintenance (p. 75)
health promotion (p. 75)
noncompliance (p. 85)
prophylactic (prō-fĭ-LĂK-tĭk) (p. 77)

As people live longer and the percentage of older adults in the population increases, society faces several major challenges. One of the most significant of these challenges involves meeting the health care needs of the aging population.

Today's older adults are generally healthier than were the older adults of previous generations. Improvements in sanitation, public health, and occupational safety implemented during the twentieth century have helped raise the age at which a person can expect to experience a life-threatening disease.

Older adults can and do experience acute, life-threatening medical conditions just as younger persons do, but acute episodes in older adults are more likely to be associated with chronic conditions. Either an acute condition is caused by a chronic problem, or a chronic problem persists after an acute episode. It is estimated that 80% of older adults live with chronic conditions such as arthritis, hypertension, diabetes, heart disease, and vision or hearing disorders. Most of those with a chronic illness are able to meet their own needs; only approximately 25% require any special type of care. Both acute health care and chronic health care are expensive.

Although older adults make up only approximately 12% of today's population, they account for more than one-third of all health care expenditures. For the most part, today's older adult population has benefited from improvements in medical care. Advances in surgery, technology, and pharmacology have enabled us to prolong life in situations that even a few years ago would have been impossible.

This level of care is not without substantial cost. Because a significant portion of older adults' health care expenses is covered by Medicare and Medicaid, the burden on the younger members of society is becoming overwhelming. Despite steady increases in payroll taxes on the working population, Medicare has operated at a deficit since the start of the twenty-first century. Because there is a limit to how much taxpayer money is available, society must identify appropriate and acceptable ways to control health care costs.

One way of dealing with a steady increase in demand for health care services involves rationing the type and amount of care provided to older adults. This approach would prohibit or severely limit the type of care provided, particularly in cases in which the potential for significant improvement in health

Get Ready for the NCLEX® Examination!

Key Points

- Nurses must possess knowledge about the normal structures and functions of all of the body systems so that deviations from the norm can be detected.
- All of the body systems are affected to a greater or lesser degree by aging. Although these changes are normal and should be expected, they can have a significant impact on the older person's functional ability, self-image, and lifestyle.
- In addition to normal, age-related changes, a variety of diseases is increasingly common in the aging population.
- Nurses must be careful to distinguish between normal physiologic changes and abnormal alterations that indicate the need for prompt medical attention.

Additional Learning Resources

SG Go to the Study Guide on pp. 379–397 for additional learning activities to help you master the chapter content.

Evolve Go to your Evolve website (http://evolve.elsevier.com/Wold/geriatric) for the following FREE learning resources:

- Animations
- Answer Guidelines for Nursing Care Plan Critical Thinking Questions
- Answers and Rationales for Review Questions for the NCLEX® Examination
- Glossary with pronunciations in English and Spanish
- Video Clips

Review Questions for the NCLEX® Examination

1. The normal physiologic change of aging that places an elderly client at an increased risk for digitalis toxicity is decreased:
   1. Gastrointestinal motility
   2. Bone density
   3. Vital capacity
   4. Glomerular filtration

2. Which are normal age-related changes? (Select all that apply.)
   1. Decreased visual acuity
   2. Increased heart rate
   3. Decreased long-term memory
   4. Increased motor responses
   5. Increased muscle mass
   6. Decreased depth of respiratory
   7. Increased calorie requirements
   8. Decreased bladder capacity
   9. Increased subcutaneous tissue
   10. Decreased rate of peristalsis

3. Older patients with Parkinson's disease are likely to exhibit:
   1. Rigidity and tremors when at rest
   2. Hemiparesis and aphasia
   3. Exaggerated reflexes and dementia
   4. Tremors with movement and weakness

4. The nurse observes that there is no hair on the legs of an 80-year-old man. This is most likely related to physiologic changes affecting the:
   1. Integumentary system
   2. Circulatory system
   3. Endocrine system
   4. Nervous system

5. When discussing expected changes in the female reproductive system to an older adult, the nurse should explain that:
   1. Increased pubic hair is expected
   2. Uterine enlargement is normal
   3. Vaginal tissues become more vascular
   4. Production of vaginal secretions decreases

6. The nurse performs an assessment of the skin of an elderly person. The abnormal finding that needs to be reported is:
   1. Increased patches of dark pigmentation on exposed skin
   2. A dark, elevated patch that bleeds when touched
   3. Deep wrinkles and frown lines around the mouth and eyes
   4. Numerous brown or flesh-colored skin tags around the neck

7. The nurse encourages the client to maintain a steady weight in the recommended range to decrease risk of the most common endocrine disease observed in the elderly, which is:
   1. Hypothyroidism
   2. Hyperthyroidism
   3. Diabetes mellitus
   4. Diabetes insipidus

status is limited. For example, some of the more costly treatments and procedures (e.g., renal dialysis and bypass surgery) could be refused if the person were older than a predetermined age. This method has been adopted in some countries but is unpopular in the United States. To avoid rationing health care, we must find ways to maximize the effectiveness of our health care expenditures. In 2009 a health care reform legislation was passed, but it is very complex and the legality of some proposed changes is being challenged. Time will tell whether this is truly an effective reform or not.

Most studies reveal that it is more cost-effective to prevent problems than it is to attempt to cure or treat them. Therefore, more health care providers and the public (including older adults) are beginning to recognize the need to devote more attention to **health promotion** and **health maintenance**.

Health promotion is not a new concept. For decades, health care providers have stressed the importance of good nutrition, exercise, and regular medical care. Although most of this information was directed toward younger people, many older people who desired to live longer, healthier lives also paid attention. As the benefits of healthy lifestyle choices became obvious, television, radio, and other media joined health care providers in promoting health awareness. Awareness of the importance of good health-maintenance practices increased. Many individuals have modified their lifestyle and health care practices to improve their overall health and quality of life (Box 4-1). Those who are unaware or are unwilling to heed this advice persist in risky, health-threatening behavior. Nurses need to be aware of the health promotion and maintenance practices that will most benefit older adults. Nurses also need to understand why some older adults choose to adopt positive health behaviors, whereas others persist in seemingly self-destructive behavior.

Box 4-1 Advice for the Young and Not-So-Young Adult

- Accept that you are getting older—adjust to the changes, and plan for possibilities.
- Explore options for the future—look for things you want to accomplish in your life.
- Find work or creative outlets that make you happy—look for ways to grow throughout your life.
- Modify your lifestyle to promote health—exercise, watch your diet, and manage stress.
- Develop and maintain relationships—bonds formed with friends and loved ones provide support as we age; we can never have too many.

RECOMMENDED HEALTH PRACTICES FOR OLDER ADULTS

DIET

Older adults should consume a well-balanced diet based on the food pyramid and recommended daily allowances of nutrients. Some changes in caloric intake and protein and vitamin needs appear to be desirable with aging (see Chapter 6).

When special diets are indicated, older adults need to learn how to read and interpret the information provided on packaging labels. This is particularly important with sodium-restricted diets because sodium is common in foods that do not necessarily taste salty. Because food labels are often printed in very small type, older adults should be sure to bring their eyeglasses or a magnifying glass when they shop. If someone else shops for them, that individual needs to know how to shop wisely.

EXERCISE

Regular exercise should be a part of any daily plan for older adults (Figure 4-1). Exercise can help keep the joints flexible, maintain muscle mass, control blood glucose levels and weight, and promote a sense of well-being. Exercise does not need to be aerobic to benefit older adults. Walking, swimming, golfing, housekeeping, and active lawn work or gardening are all considered exercise. To be of most benefit, exercise should consist of at least 30 minutes of continuous activity. The type, level, and amount of exercise that is most beneficial differ for each person and should be based on physician recommendations.

TOBACCO AND ALCOHOL

It is never too late to stop smoking. Even the body of an older person can repair damage once smoking is discontinued. Cessation may be difficult when smoking has been a long-standing habit, but various aids are

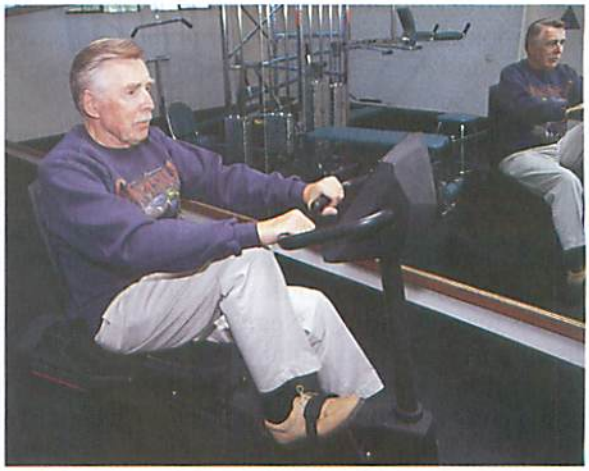

FIGURE 4-1 An older adult in exercise class practices health promotion.

now available to help smokers quit. Before using any of these aids, older adults should seek guidance from their physicians because they may need to follow some special precautions related to existing health problems.

Excessive consumption of alcoholic beverages is never recommended. Alcoholism is an all too common problem in the older adult population—both men and women—because alcohol may be used as a means of coping with depression, sleep disorders, or other problems. Occasional or moderate alcohol consumption by older adults usually is not prohibited or restricted unless some medical condition or medication precludes its use. Some physicians even recommend a glass of wine or beer as an appetite enhancer in certain situations.

PHYSICAL EXAMINATIONS AND PREVENTIVE OVERALL CARE

Older adults should be examined at least once a year by their physicians—more often if known health problems exist. Some older adults resist this because of the cost or fear about what the physician may find. Cost is a real concern to many older adults, but inadequate health maintenance should be of more concern. A delay in the recognition of problems may make them more difficult and more costly to treat. Physical examinations provide an opportunity for the physician to detect problems before they become more serious, to monitor and treat chronic conditions, and to prevent some health problems.

Physical examinations in older adults should include evaluations of height and weight, blood pressure, and blood cholesterol levels if this has been a concern, as well as a rectal examination. In addition, women should have a pelvic examination, mammogram, and Papanicolaou (Pap) test to rule out cervical cancer. Older men need a prostate examination and blood tests to rule out prostate cancer. Persons with identified risk factors for colon cancer require occult blood screening and, possibly, a colonoscopy.

Evaluation of joints, feet, and gait should be part of the physical examination. Problems with the knees and shoulder joints can cause pain, limitation of activity, poor sleep, and decreased overall function. Some problems require surgical correction, whereas others can be treated more simply using analgesics, antiinflammatory medications, or physical therapy. Inspection of the feet often reveals problems. Many older adults have difficulty caring for their toenails because of poor vision, an inability to reach the feet, or hypertrophic nail changes. Bunions, calluses, and corns also cause problems for older adults. Neglecting the feet can lead to discomfort, restricted mobility, and a poorer quality of life. If the feet are not properly cared for, the risks for infection and even amputation increase, particularly in older individuals with compromised circulation. Older adults should be encouraged to wear properly fitted shoes that provide good support. Regular visits to a podiatrist can significantly reduce foot problems. Joint or foot problems, illness, pain, and other conditions commonly seen with aging can contribute to gait changes that are likely to result in imbalance or falls. When gait problems are identified, physical therapy for gait retraining and strengthening exercises, use of assistive devices, and environmental modification are appropriate (see Chapter 9).

Vision should be checked yearly to monitor for glaucoma or other eye problems. Refractive examinations can detect the need for a change in eyeglass prescription. Hearing examinations need not be done on a yearly basis unless a problem is suspected. When signs of diminished hearing are present, audiometric testing is appropriate.

Blood tests for hypothyroidism, diabetes, or cholesterol levels; electrocardiograms; and other diagnostic tests are not routinely part of the physical examination. Older adults should be aware of the need to communicate any symptoms they experience so that their physicians can determine the need for additional testing.

In addition to regular physical examinations, older adults should be sure to obtain immunization against diseases such as pneumonia and influenza that are more common in older adults than in younger adults. Because the immune system is less responsive than that of younger persons, it is important that they receive vaccinations in a timely manner.

The pneumonia vaccine is given starting at 65 or 70 years of age; repeating the vaccination every 10 years is recommended. The influenza vaccine must be obtained on a yearly basis, usually in the fall, because the strain of the virus changes frequently. Flu shots can be obtained from private physicians or from clinics that are available in most communities. Even with immunization a larger percentage of elderly contract influenza.

Although tetanus infection is rare in the United States, approximately half of the cases of tetanus affect the elderly. Persons who were never immunized against tetanus should receive a three-dose series of injections. Those who have been immunized at an earlier age should receive a tetanus booster every 10 years after age 65. Specific injuries may require a booster even if 10 years have not elapsed.

The risk of developing shingles, a herpes zoster infection that causes a classic rash and painful neuralgia, increases with age. The shingles vaccine has been available since 2006. This vaccination is recommended for people over age 60, provided they have a normal immune system. Benefits of this vaccine should be determined based on individual risks, preferences, and the physician's recommendations. It is very expensive and is effective approximately 50% of the time.

The need for the hepatitis B immunization is based on individual risk factors and should be discussed with a physician.

Prophylactic use of medications such as aspirin (to prevent cardiovascular disease) and vitamin E (thought to decrease risk for stroke, heart attack, and Alzheimer's disease) is gaining increased acceptance in the medical community. Older adults should be encouraged to discuss the possible benefits of this type of therapy with their physicians and then follow the recommendations.

Use of prescription and over-the-counter medications is common in the aging population. Older people with medical conditions must understand the reasons for and the importance of their treatment plans. They should keep a record card listing all of their medications and the names of the physicians who prescribed them. This card should be shown to all licensed professionals they see so that serious drug interactions are prevented. Older adults must know how and when to take prescribed medications, how to use over-the-counter medications safely, how to store their medications, and when to report side effects. Sharing prescription medications with friends or neighbors is dangerous and should be avoided. Medications can be confusing and even overwhelming to many people. Additional precautions regarding medications are discussed in Chapter 7.

To keep track of medical appointments, older adults should have a calendar or datebook where they can record all appointments or reminders for things such as immunizations. They also should be aware of signs and symptoms that indicate a need to seek medical attention that exceeds routine yearly examinations. Signs and symptoms indicating the need for prompt medical attention are listed in Box 4-2.

Older adults who have health problems or allergies, those taking medications such as heparin, and those with implanted medical devices such as pacemakers are advised to wear a Medic Alert bracelet or necklace. If they do not wish to wear such a warning device, these individuals should at least carry a card in their wallets or purses to provide the necessary health information.

Health Promotion

Medications

- Take prescription medications only as ordered.
- Store medication as directed.
- Report any suspected side effects to your physician.
- Keep a card with names of all medications, dose, and name of physician with you at all times.
- Keep the card up to date.
- Show the card to all health care providers.
- Wear a medical alert bracelet, listing serious diseases and allergies.
- Do not use OTC medication without consulting physician or pharmacist.
- Do not take anyone else's medication or share your medication with anyone.

Box 4-2 Signs and Symptoms Indicating a Need for Prompt Medical Attention

- Severe pain; radiating or crushing chest, neck, or jaw pain; severe unremitting headache
- Difficulty breathing
- Loss of consciousness
- Loss of movement or sensation in any body part(s)
- Sudden vision changes
- Unusual drainage or discharge from any body cavity
- Wounds that do not heal
- Nausea or vomiting that persists for 24 hours or longer
- Elevated body temperature
- Inability to urinate
- Swelling of the lower extremities
- Excessive (greater than 10%) weight gain or loss
- Sudden or dramatic behavior changes
- Sudden changes in speech or ability to follow directions.

DENTAL EXAMINATIONS AND PREVENTIVE ORAL CARE

Dental examinations should be obtained and an inspection of the oral cavity performed on a regular basis (at least once a year). Today's older adults are keeping their natural teeth longer than previous generations were able to, probably because of better nutrition and improved prophylactic dental care. Gum disease and tooth decay are major causes of tooth loss. To prevent or slow the progress of these dental problems, older adults should brush their natural teeth at least daily using a fluoride toothpaste and should floss carefully between the teeth. Mouthwash may help refresh the breath, but it cannot replace regular brushing.

It is recommended that older adults use soft-bristle brushes to clean all tooth surfaces, particularly those individuals suffering from arthritis, because they may have difficulty holding and brushing with a standard toothbrush. Enlarging the brush handle using tape, wide rubber bands, sponges, or polystyrene or lengthening the brush by attaching a wood or plastic strip may make it easier to hold. Some older adults prefer an electric toothbrush that provides the proper movement.

Circular or short back-and-forth brushing works best to clean the teeth. Close attention should be paid to removing all plaque from along the gumline. Red, swollen, or bleeding gums indicate the need to see a dentist. People should have their teeth professionally cleaned at least once a year to remove stains and other debris missed by routine brushing.

Older adults who wear dentures still need regular oral examinations because people older than 65 years of age account for more than half of the new cases of oral cancer each year. Good oral hygiene is also necessary. Dentures must be brushed or cleaned at least once a day to remove food debris, bacteria, and stains and to prevent gum irritation or bad breath. Some denture wearers prefer to brush the dentures using a special dentifrice, whereas

others prefer to use a soaking solution that works overnight. Either cleansing method is appropriate, but the chemicals should be rinsed thoroughly from the dentures before they are put back into the mouth.

An older person wearing dentures for the first time needs to become adept at inserting and removing them. Eating with dentures is often awkward, necessitating some relearning so that the wearer can chew effectively. Taking smaller pieces of soft, nonsticky foods and chewing more slowly are recommended. Because dentures make the mouth less sensitive to heat, cold, and foreign objects such as bone fragments, special care is required when eating.

Poor fit is a major reason that some older adults fail to wear their dentures regularly. This contributes to problems with nutrition and digestion. A few extra appointments with the dentist are often necessary to help fit the dentures properly. These adjustments are important because poorly fitting dentures can cause irritation to the gums or mucous membranes of the mouth. Additional adjustments may be needed if the denture wearer gains or loses weight.

Other changes in the oral cavity (e.g., dryness) are also common with aging. Although saliva production does not decrease in all older adults, a variety of medical conditions, medications, and treatments can cause or contribute to dry mouth. Dry mouth can best be relieved by drinking more water. Excessive use of hard candy, caffeine beverages, alcohol, or tobacco increases dryness of the mouth.

MAINTAINING HEALTHY ATTITUDES

Strong connections exist between the mind and body. Older adults who maintain a positive outlook on life tend to follow good health practices and remain healthier longer.

Regular interaction with other people of all age groups helps maintain a positive attitude toward life. It is recommended that older adults get out of the house as often as possible, even if only for shopping or dinner. Keeping in touch with family and friends is important. When spouses or friends are lost through death or relocation, older adults benefit from attempting to establish new relationships by joining church or community social groups. Volunteering in hospitals, schools, literacy centers, or other community agencies is a popular and desirable activity because it helps promote a sense of value and self-worth (Figure 4-2). As noted earlier in this text, many elderly continue to remain active in the workforce. This may be out of financial necessity or as a way to remain a productive, contributing member of society. A decrease in social interaction can contribute to the deterioration of cognitive and adaptive skills. Nurses cannot force an individual to participate beyond his or her wishes, but a little encouragement and information about options can help stimulate the older person's interests.

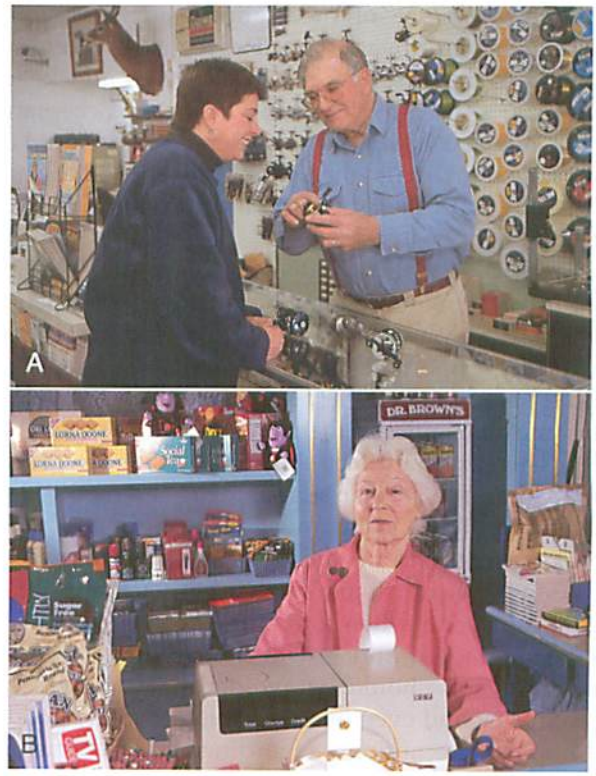

FIGURE 4-2 Many older people continue to work and learn after the traditional retirement age.

FACTORS THAT AFFECT HEALTH PROMOTION AND MAINTENANCE

The actions taken to promote, maintain, or improve health are based on that individual's perception of his or her health. Health perceptions influence day-to-day choices regarding hygiene practices; nutrition; exercise; use of alcohol, drugs, and tobacco; accessing health care; and many other activities. Health-maintenance practices include safety precautions taken to prevent injury from automobile accidents, falls, poisoning, and other hazards. Health perceptions and health-maintenance practices in older adults are influenced by personal beliefs, religious and cultural beliefs, socioeconomic status, education, and life experiences.

As people mature, they establish a set of beliefs, perceptions, and values related to health. These perceptions include basic ideas regarding what health is and how to best maintain it. These beliefs form the foundation for each person's health practices. Based on their unique beliefs, most people perform activities that they perceive to be helpful in maintaining their health and avoid activities they perceive as harmful. It is difficult to change a person's lifetime health practices. Only those who are highly motivated to change are likely to be successful.

RELIGIOUS BELIEFS

Religious beliefs contribute to an individual's perceptions. These beliefs can promote health maintenance or interfere with good health practices and result in

increased health risks. For example, some religions teach that the body is a temple, stressing the importance of avoiding alcohol, tobacco, and other behaviors that are harmful to health. Individuals with these religious beliefs tend to live longer, healthier lives than do people who do not share these values. Other persons, whose religions teach that illness is a punishment for sins, may feel that they are not worthy of health and must endure illness as atonement for things they have done wrong in their lives.

CULTURAL BELIEFS

Cultural beliefs and practices also play a significant role in health perception and health maintenance. For example, reliance on home health remedies is common in many cultures. Some home remedies are harmless, whereas others are quite dangerous. Problems can occur when home remedies are used in place of conventional medical care or when their use results in delayed care, which can be serious or even fatal if the illness is a serious one. Culture also plays a significant role in the selection of food and the methods used for food preparation. These preferences and practices play a significant role in health promotion and maintenance. Diets that consist mainly of fruit, vegetables, and grains are common in some cultures, whereas diets high in fat and sodium are prevalent in others. These variations can contribute to the good health of some ethnic populations or to the health problems seen in others.

Cultural Considerations

Biocultural Differences

Considerable evidence still exists that race and ethnicity contribute to disparities in health throughout the United States. The following are some of these disparities:

- Higher incidence of hypertension in the African-American population
- Higher incidence of diabetes in the American-Indian and Hispanic populations
- Higher incidence of stomach and cervical cancer in the Hispanic population
- Higher incidence of obesity among African-American and Hispanic women

As our society becomes increasingly diverse, nurses need to become more aware of the religious and cultural factors that affect the health-maintenance practices of all persons (Figure 4-3). Information about the beliefs and practices of organized religions and major cultural groups is available through sources such as textbooks on transcultural nursing. Although nurses can gain valuable insight from such sources, we must be careful not to generalize. It is common for two individuals from similar religious and cultural backgrounds to have widely disparate perceptions and practices. Although a general understanding of cultural factors is important, the best source of accurate information about a person's beliefs and practices is that individual. An overview of common health practices helps nurses understand the underlying values and beliefs that motivate each individual.

FIGURE 4-3 While providing information in a home care setting, this nurse compares traditional and Western remedies. Culture influences how health, illness, and pain are perceived. The nurse must take cultural variations into account to communicate effectively with patients and their families.

KNOWLEDGE AND MOTIVATION

Factors other than religious and cultural beliefs also play a part in health perceptions and health-maintenance practices. Knowledge plays a key role in maintaining health and promoting safety; knowledge of recommended health practices is essential to make good choices. Health and safety teaching must start early and be reinforced throughout life. Whenever there is a significant change in a person's health status, additional teaching is necessary to ensure the safety and highest possible level of wellness of that individual. People cannot make informed decisions regarding their health and safety unless they know the ramifications of various behaviors. Individuals experiencing cognitive changes resulting from disease processes or chemical dependence may not be able to understand the need for safety or health-maintenance practices despite repeated teaching. People with severe cognitive or perceptual problems are likely to experience injuries and alterations in health-maintenance practices.

Health maintenance requires motivation in addition to knowledge. People experiencing grief, depression, hopelessness, or low self-esteem may not be motivated to maintain good health practices. Motivating individuals to maintain health is often difficult. All of the teaching in the world will not replace the desire to live a healthy life.

MOBILITY

Even people who are knowledgeable and motivated to maintain their health may have trouble if they cannot obtain the goods or services they need. People with

limited physical mobility, transportation, or money are *likely* to experience difficulty. A person who knows the importance of nutritious food but who cannot get to a store or afford the food will have difficulty maintaining good health. A person who knows that it is important to see a physician but who can neither get to the office nor pay for medical care is similarly at risk.

Assessment of the values, perceptions, knowledge level, motivations, and lifelong health practices of individuals provides an understanding of the likelihood of problems with health maintenance. Previous behavior is a good indicator of future practice and motivation.

Many adaptive and assistive devices have been developed to promote safe mobility for older adults and others experiencing difficulty moving about or performing many of the activities of daily living. The Department of Education has a website (www.abledata.com) and telephone line (1-800-227-0216) to provide information on thousands of products designed to assist people with physical limitations to help themselves.

PERCEPTIONS OF AGING

Many beliefs about health and health maintenance are formed early in life. The longer a belief is held, the harder it is to change that belief. Therefore, it is often difficult to change the health behaviors of older adults.

Perceptions of good health and good health practices vary widely among the aging population. Older adults have their own beliefs about what is normal and expected with aging. Some are willing to accept declining health as a normal part of aging, whereas others are not. Those who perceive a decline in health as normal and expected with aging may do little to prevent loss of function, simply accepting the changes. It is common to hear these older adults say, "Why should I bother to see the doctor? It's just old age." Some older adults often ignore early signs of illness or attribute them to aging. This often results in a delay before seeking medical care. Others, particularly those who have followed good health practices throughout their lives, believe that old age is not synonymous with disease or loss of function. They continue to follow high-level health-maintenance practices in all aspects of their lives, including diet, exercise, rest, and medical attention.

Perceptions regarding aging greatly affect a person's motivation and willingness to participate in health-maintenance activities. A person who feels capable and in control of his or her life is more likely to be willing to change behaviors and to work at maintaining health. Older adults who feel useless, helpless, or without purpose, particularly the newly widowed or those who are estranged from their families, are less likely to be motivated to maintain their health.

IMPACT OF COGNITIVE AND SENSORY CHANGES

Cognitive and sensory changes related to aging or disease can lead to problems with health maintenance. Even the normal sensory changes of aging can increase the risks for personal neglect or injury. When significant cognitive or perceptual problems occur, the risks are even greater.

An older person with changes in vision and smell may have body odor or wear soiled clothing because he or she cannot see or smell soiling. Changes in vision, hearing, smell, sensation, taste, and memory can also lead to decreased awareness of normal environmental hazards. Sensory changes increase the risk for injuries from falls, poisoning, fire, and other traumatic events. Vision changes can cause the older person to miss the edge of a step or a curb, resulting in a fall. Changes in smell and taste can result in consumption of spoiled, unsafe food. Changes in sensation can lead to the use of overly hot bath water, resulting in burns. Changes in the sense of smell can cause the older adult to not perceive a burning odor, leading to the increased likelihood of injury from fire.

Older adults who are seriously impaired either perceptually or cognitively commonly lack awareness of their own needs. They may ignore parts of their hygiene or may completely forget to perform routine health-maintenance activities such as bathing, eating, or taking medication. Common health practices may be neglected, even though the person is physically capable of performing the activities.

Cognitively impaired older adults are at serious risk for injury because they are unable to recognize the danger of their actions or lack of actions. They may forget to turn off the burner on the stove, forget to put on a coat when going outside in winter, turn up the furnace instead of turning it off, or walk into a busy street without looking for traffic. Severely impaired persons are at great risk for experiencing problems related to safety and health maintenance, often requiring some form of supervised living or institutional care for their own protection.

IMPACT OF CHANGES RELATED TO ACCESSIBILITY

Aging persons are likely to experience more problems accessing goods and services than are younger people. Access may be limited by decreased physical mobility, lack of transportation, or limited finances. If more than one of these factors is present, the risk for ineffective health maintenance increases dramatically.

Physical limitations, including loss of motor skills, decreased strength and endurance, and the presence of disease, make health-maintenance activities more difficult. Decreased physical strength and agility can interfere with normal health-maintenance practices. Simple acts such as bathing, cooking, and cleaning

can be too physically demanding for some older adults, who may be too fatigued to even attempt normal self-care activities. This lack of strength or energy often results in poor health-maintenance practices.

Transportation difficulties present many problems for older adults. Simply getting to the grocery store, pharmacy, or physician's office when necessary can be a major impediment to health maintenance. Even if older adults desire to practice good health maintenance, they may be hindered by a lack of transportation.

Finances cannot be ignored when discussing health maintenance. Although Social security, Medicare, and Medicaid offset some financial concerns, they do not cover the entire cost of health care prescriptions or meals. The lack of these resources may cause older adults to limit medical care. Many older adults persist in trying to treat themselves before seeking medical attention. They may try to stretch the time between medical visits or take less than the prescribed amount of medications to conserve money. Financial constraints can also affect the ability of the older person to purchase special foods and equipment necessary to promote or maintain health.

Finances can also affect safety. Many older adults live in older housing, which is more likely to contain safety hazards such as poor electric wiring, steep stairwells, and inadequate lighting. High crime rates in poorer areas make older adults who live there particularly vulnerable to rape, mugging, and theft. Even if these factors are not a problem, simple home maintenance can increase the risk for injury. Because it is costly to hire people to do even routine home-maintenance chores, many older adults attempt these tasks alone. Some fall from chairs or ladders while trying to paint walls, clean windows, or hang pictures. Many injure themselves trying to shovel snow or mow the lawn.

HOME HEALTH

As already discussed, most older adults wish to remain at home for as long as possible. For them to do so, additional assistance is likely to be needed. Some of this assistance does not require professional training and can be provided by family members. More complex interventions require the expertise of specialized caregivers. As the number of older adults has increased, the demand for home care services has also increased and promises to continue to grow for the foreseeable future. Home health interventions can both promote health and help the elderly person maintain the highest level of function possible for the longest period of time. Assistance in the home can help overcome problems related to noncompliance by providing motivation, verifying that care is completed, and providing better access to health care services.

According to the National Association for Home Care, more than 7.6 million people in the United States require some form of home care. Almost 70% of these are over age 65. Medicare spending for home health care has fluctuated over the past 15 years from a low of $8 billion in 2001 to a high of $18.3 billion in 2009. If the legislation stands, changes proposed under health care reform are projected to decrease spending for home health care by 13% over the next 10 years. Money saved will be used to offset the cost of providing coverage for younger uninsured individuals. These numbers do not include unpaid care provided by family members, friends, or volunteers. Researchers estimate that in the year 2000 unpaid caregivers provided services that had an economic value of **$257 billion**. Without the dedicated help of all of these individuals, the health care delivery system would be overwhelmed, and many older adults would experience a poorer quality of life.

UNPAID CAREGIVERS

Most unpaid caregivers are family or friends of the elderly person, although they may be volunteers from a church or other charitable organizations. Caregivers can be divided into primary and secondary classifications. Primary caregivers provide for most of the day-to-day needs of the elderly. These are usually close family members such as spouses or children, but they may be paid employees. Secondary caregivers help intermittently with things like shopping, transportation, and home maintenance. Usually, those family members who reside closest to the elderly person provide the most direct assistance, whereas those who live farther away are less involved. This can be a source of interfamily strife. One family member may be resentful of doing everything while others do little or nothing. Of course, this is not always the case; some families develop a good balance and distribution of effort. Even family members who live at great distances from an elderly relative can provide high-level long-distance support, usually through an intermediary agency.

Most caregivers are women. They are of all ages, with the average being in the mid- to late forties. They come from all ethnic, racial, and religious backgrounds. Most are providing care to the elderly in spite of multiple other responsibilities, including their children, homes, and jobs. Many caregivers experience exhaustion, anxiety, and burnout as a result of multiple demands, particularly when they feel that their assistance is not appreciated. Often they will require teaching, guidance, and assistance while learning how to perform new skills and effective ways to respond to the needs of the older adult. This teaching needs to be done in a kind and courteous manner. According to interviews with unpaid caregivers, overly judgmental nurses and other professionals made them feel inept, inadequate, and anxious. Nurses should be careful

not to denigrate the services or capabilities of these caregivers. Unpaid caregivers should not be criticized or made to feel guilty that they are not doing enough. Instead, the nurse should work to develop a partnership with family caregivers that includes ongoing assessment, teaching, coaching, psychological support, and guidance. Nurses and other professionals need to be kind to unpaid caregivers, to recognize the value of their service, and to provide positive feedback. Box 4-3 lists agencies that provide assistance and information to elder caregivers.

PAID CAREGIVERS

Almost any kind of home help can be arranged, from the simplest to the most complex. Agencies that provide home health services have proliferated in recent years. Many of these are highly ethical organizations that provide a valuable service to the elderly. Others are less scrupulous and may even increase the risks for a vulnerable older person. Informal referrals from friends, senior citizen centers, churches, or volunteer organizations may be helpful in locating a reliable caregiver. Additional help with identifying qualified help can be obtained from the local Area Agency on Aging offices, state or local social service agencies, or tribal councils. Although some assistance may be provided free of charge by volunteer organizations and some may be covered by insurance or Medicare, the services of most independent contractors or private agencies require considerable out-of-pocket expense. It is wise to verify the cost of services before making any commitments. Home care is usually less expensive than care in an institutional setting, but this is not always the case. Much will depend on the extent and complexity of the care needed. Cost is always an issue, whether providers admit it or not. Even wealthy people need to be cautious that they spend their money wisely; those with average incomes need to pay even more attention to costs.

Box 4-3 Elder-Related Information and Services

- Administration on Aging (www.aoa.gov)—202-619-0724
- Eldercare Locator (www.eldercare.gov)—800-677-1161
- Medicare benefits (www.medicare.gov)—800-633-4227
- National Institute of Medicine (www.medlineplus.gov) 202-334-2352
- National Institute on Aging Information Center (www.nia.gov)—800-222-2225
- National Council on Aging (www.benefitscheckup.org) 202-479-1200
- Federal, state, or local government benefits (www.govbenefits.gov)—800-333-4636
- Department of Veterans Affairs (www.va.gov)—877-222-8387
- USA.gov (USA.gov/Topics/Seniors.shtml) 800-333-4636
- Department of Housing and Urban Development (www.hud.gov)—202-708-1112
- Low-Income Home Energy Assistance Program (www.ncat.org)—866-674-6327
- National Resource Center on Supportive Housing and Home Modification (www.homemods.org)—213-740-1364
- American Association of Homes and Services for the Aging (www.aahsa.org) 202-783-2242

Box 4-4 Questions to Ask When Selecting a Home Health Agency

- How long has the agency been in business in this community?
- What services does the agency provide?
- What do these services cost? Is financial aid available? How are charges billed?
- Is the agency certified by Medicare? Is it accredited by any organization such as The Joint Commission Long Term Care accreditation program ?
- Does the agency have a Bill of Rights for the elderly?
- Does the agency have a specific written plan of care for the older adult that is developed with patient and family input?
- What kind of screening is done when hiring employees? Are references available to the family?
- How are caregivers trained and supervised?
- What level of professional supervision is provided?
- Is there an RN on-call 24 hours a day?
- How and when is information communicated between the agency and the family?
- What is done to protect confidentiality?
- How are conflicts or complaints resolved?

Modified from the U.S. Department of Health and Human Services Administration on Aging Fact Sheet, "Home Health Care: A Guide for Families."

It is always wise to check references before hiring anyone to work with the elderly. Because the caregiver is often alone and unsupervised with the older adult, any signs of unscrupulous or abusive behavior must be investigated. Ideally, paid caregivers will have a history of punctuality and reliability because an elder often becomes anxious if the caregiver is unreliable. These caregivers should provide certification that they are free of communicable diseases, including tuberculosis. A background check should be conducted to ensure that they have committed no serious criminal acts. Reputable home care agencies often provide these checks as part of their service and may also bond their employees to protect the patient against loss due to thefts or damage to property. It is also advisable to plan an introductory visit and trial sessions to determine the compatibility of the caregiver and the elderly person. Box 4-4 provides a list of important questions to ask when selecting a home health agency.

TYPES OF HOME SERVICES

Elderly people require different levels of home assistance. The level of care needed is likely to change as the person's health status changes over time.

An elderly person who is generally healthy may require only transportation to appointments and assistance with household chores such as mopping, vacuuming, laundry, grocery shopping, and meal preparation—all considered unskilled interventions.

An infirm elderly person may need additional help with hygiene and dressing. Elderly persons with altered cognition may also need ongoing supervision for safety and help with medication preparation and administration. More compromised older adults may require assistance with dressing changes, management of wounds, pain management, or other skilled interventions. Even end-of-life hospice care may be provided in the home.

A thorough assessment by a trained professional, usually a registered nurse (RN) or social worker, can best determine how much and what kind of help will most benefit each older adult. Working in conjunction with the patient's physician, the case manager (typically an RN) assesses, plans, supervises, and coordinates services. Services are best delivered by a team that includes RNs, licensed practical nurses (LPNs)/licensed vocational nurses (LVNs), health aides, housekeepers, dietitians, and social workers, as well as occupational, physical, and speech therapists. Nursing supervision of unlicensed personnel is critical for safe home care. Aides must have adequate training to perform safely in the care setting, and they need to know the limits within which they must work. For example, aides are not permitted in most cases to measure and dispense medications, although they may be permitted to give medications to the elderly person if the nurse or a family member first sets these up in prelabeled and timed packaging. Social workers help manage the financial aspects of care, as well as interaction, with other agencies or facilities, particularly if the patient needs to be admitted to a hospital or other health care facility. Social workers also are responsible for the assessment of family dynamics and possible intervention in suspected cases of neglect or abuse. A chaplain may or may not be part of the team. Home hospice is more likely to have chaplains available for end-of-life issues. In addition, the case manager may have responsibility for arranging that all necessary equipment and supplies (such as oxygen, wheelchairs, and hospital beds) are available and remain in good operating condition.

❖ NURSING PROCESS FOR INEFFECTIVE HEALTH MAINTENANCE AND INEFFECTIVE SELF HEALTH MANAGEMENT

Elderly individuals who are unable to identify or seek out help and those who are unable to follow through with a therapeutic regime are at risk for serious health-related problems (Nursing Care Plan 4-1). Assessment of health perceptions and health-maintenance practices is necessary to take into account the unique problems, beliefs, and perceptions of each aging person. It is important to assess both past and current health-management practices because these are good predictors of future health practices.

▪ Assessment/Data Collection

- How does the person rate his or her current health?
- Does the person feel in control of the conditions that affect his or her health?
- What does the person routinely do to maintain his or her health?
- How does the person manage illnesses?
- What are the person's religious or cultural beliefs regarding health and health practices?
- How do the person's health practices compare with recommended health practices?
- How often does the person see a physician, dentist, or other health professional?
- Does the person undertake high-risk behaviors such as smoking, excessive alcohol intake, or drug consumption?
- Does the person have adequate financial resources to maintain his or her health?
- Does the person have access to the goods and services necessary to maintain health?
- Is the person's knowledge adequate to make informed decisions regarding his or her health?

See Box 4-5 for a list of the characteristics of older persons who are at risk for alterations in health maintenance.

▪ Nursing Diagnoses

Ineffective self health management
Ineffective health maintenance

▪ Nursing Goals/Outcomes Identification

The nursing goals for an older person demonstrating ineffective health maintenance are to verbalize appropriate health-maintenance practices, demonstrate adequate health-maintenance practices, and identify community resources that can assist in health maintenance.

Box 4-5 Characteristics of Older Adults Who Are Likely to Experience Ineffectiveness in Health Maintenance

- Lack of adequate knowledge about recommended health practices
- Physical limitations
- Limited financial resources
- Altered cognitive or perceptual function
- Difficulty accessing health-related goods or services
- Loss of motivation because of grief, hopelessness, or powerlessness

Nursing Care Plan 4-1 Health Maintenance

Mrs. Fisher is an alert, well-groomed 82-year-old who lives alone in an apartment. She has a history of type 2 diabetes mellitus. Her blood glucose levels, which you test weekly, are consistently 200 mg/dl or higher. Her physician has prescribed a 1200-calorie diabetic diet and an oral hypoglycemic medication.

When you arrive at Mrs. Fisher's apartment early for a home visit, you find an open box of ginger snaps next to the chair where she was sitting. She says, "I like to sit around most of the day and read or watch TV." You ask about the cookies and she replies, "They're not very sweet; I need to have some food that I enjoy. I won't live forever, you know." You check the bottle of oral hypoglycemic medication and find that she has taken only two tablets in the past week. She states, "I forget to take them. They don't help anyway, and they cost too much."

Nursing Diagnosis

Noncompliance

Defining Characteristics

- Consistently elevated blood glucose levels
- Failure to take prescribed medications
- Failure to follow prescribed diet
- Complaints of lifestyle changes in conflict with personal values

Patient Goals/Outcomes Identification

Mrs. Fisher will do the following:

- *Follow* her prescribed diet
- Increase her activity level
- Take her prescribed medications
- Achieve blood glucose levels of less than 120 mg/dL

Nursing Interventions/Implementation

1. Assess Mrs. Fisher for any signs of tissue breakdown or other problems related to hyperglycemia.
2. Allow her to verbalize feelings and problems experienced with activity, diet, and medications.
3. Review her daily food intake.
4. Explain the importance of following her prescribed diet.
5. Set up a reminder system for daily medications.
6. Explore ways of increasing her physical activity.
7. Encourage her to comply with the plan of care.
8. Praise positive health care behaviors.
9. Continue to monitor her blood glucose level and notify the physician if it remains elevated.
10. Arrange a consultation with the dietitian at her next physician's office visit.

Evaluation

At the next home visit a week later, you find that Mrs. Fisher's blood glucose level is 174 mg/dl. She states proudly that with the new medication system, she has remembered to take six of her oral hypoglycemic tablets and forgot one day only. She further states that she has taken four short walks with her neighbor. After providing positive feedback on these signs of improved health maintenance, you discuss diet with her. Mrs. Fisher states that she has tried to be more careful, but, because she still likes an occasional cookie, she will limit herself to one or two at most a day. Improvement is demonstrated, but Mrs. Fisher's goals are met partially only. You will continue with the plan of care and reassess her again in 1 week.

Critical Thinking Questions

1. What additional approaches could be implemented to improve compliance with the medication regimen?
2. How could you help Mrs. Fisher decrease her snack intake? Can you suggest ways to motivate her to increase her activity?

Nursing Interventions/Implementation

The following nursing interventions for ineffective health maintenance should take place in hospitals or extended-care facilities:

1. **Assess the person's ability to resume normal health-maintenance practices.** After hospitalization or rehabilitation in an extended-care facility, older adults must be assessed carefully to determine whether they are capable of returning home and resuming normal health-maintenance practices. Ideally, discharge from the facility should be delayed until the nurse can be reasonably sure that the patient is ready to take responsibility for his or her own health care needs. If possible, an assessment of the home environment should also be made before discharge. If necessary, the environment should be modified to promote health maintenance and safety. A referral for a follow-up visit after discharge helps ensure that the older person is safe and able to meet his or her health-maintenance needs.
2. **Teach the skills required to monitor health status if and when the patient returns home.**

Before discharge from a health care institution, older adults should have a thorough explanation of what they need to do to maintain health, including when to call or see the physician; what medications are required and when they should be taken; how to perform home screening procedures (e.g., blood glucose monitoring and daily weights); and how to keep records and monitor their health condition.

3. **Consult with the social worker or with agencies that can assist with health-maintenance practices.** The community social worker or social agencies may be able to help older adults meet their health-maintenance needs by providing transportation, delivering food or groceries, assisting with home maintenance, or offering other services.

The following interventions should take place in the home:

1. **Assess the existing health-maintenance practices.** The nurse should assess the older person's knowledge of the factors that promote health. Any problem areas should be examined in greater detail. The nurse should also determine what motivates the person to maintain his or her health because these motivators may be valuable if modifications in health care practices become necessary.
2. **Explain and reinforce positive health-maintenance behaviors.** The nurse should review health practices regarding diet, safety, stress management, exercise, elimination, and sleep. It is important to review when and how to contact a physician, particularly in cases of a serious illness or emergency. If older adults are receiving treatment for any health problems, they should know what health care behaviors are recommended to maintain the highest level of wellness (Box 4-6). They should know what medications to take and when to take them, as well as how to perform any special care or treatments.
3. **Assist in identifying family or community resources that promote health maintenance.** Individuals living in their homes may be unaware of services that are available to provide help. Often, a little assistance is all that is needed to enable an older person to live a healthy, independent lifestyle. If assistance is delayed, health maintenance may deteriorate to a point at which hospitalization or institutional placement is required. These services should be identified before they are required to avoid delays or waiting lists for the services.
4. **Use any appropriate interventions that are used in the institutional setting.**

NURSING PROCESS FOR NONCOMPLIANCE

A person is different than the previous diagnoses in that a person should only be considered to be noncompliant when he or she fails to follow through with recommended health practices in spite of adequate teaching and resources. Failing to take prescribed medications, failing to attend scheduled medical appointments, and failing to follow prescribed diets are examples of noncompliant behaviors. Many factors may be related to **noncompliance**: cognitive impairment, inadequate knowledge, inadequate resources, lack of transportation, fear, anger, decreased self-esteem, substance abuse, and conflict of beliefs or values. Noncompliance should be suspected when a person does not show the expected amount of progress toward wellness, when a person gets worse instead of better, or when a person develops repeated or unexpected complications.

Assessment/Data Collection

- Does the person verbalize unwillingness or inability to follow through with the necessary health maintenance or medical care recommendations?
- Does the person verbalize a conflict between personal beliefs or values and the treatment plan?
- Are there unexpected relapses, or do the health problems appear to be getting worse instead of better?
- Does the person often miss medical appointments? What reasons does he or she give?
- Is there more medication left in the bottle than would be expected if it were taken properly?
- Are there signs of the presence of prohibited foods (e.g., candy for persons with diabetes and salt shaker for persons with sodium restriction)?

Box 4-7 lists the characteristics of older persons who are at risk for noncompliance.

Nursing Diagnosis

Noncompliance

Box 4-6 Recommended Health Practices to Maintain Wellness

- Eat a well-balanced diet.
- Establish a regular exercise program.
- Quit smoking.
- Consume alcohol in moderation.
- Get routine immunizations as recommended.
- Stay involved in activities and with others.
- Keep a healthy attitude.
- See the dentist and physician regularly.

Box 4-7 Characteristics of Older Adults Who Are Likely to Be at Risk for Noncompliance

- Cognitive or perceptual problems
- Lack of adequate financial resources
- Poor self-esteem or altered body image
- Lack of a support system of friends and family
- Substance abuse problems
- Negative past experiences with the health care system
- Differing cultural or religious beliefs

Patient Goals/Outcomes

The patient goals for an older person demonstrating noncompliance are to identify factors that contribute to noncompliant behavior and demonstrate the acceptance of treatment.

Nursing Interventions

The following nursing interventions for noncompliance should take place in hospitals or extended-care facilities:

1. **Identify the reasons for noncompliant behavior.** A person might not comply with recommended health-maintenance practices for many reasons. Unless the nurse can determine the specific reasons why the person is not following the recommended practices, interventions are likely to be inappropriate and unsuccessful. If the person does not take medication because of forgetfulness, more teaching will not help. If the person refuses medication because he or she feels unworthy of living, no amount of reminders will help. Interventions must address the root problem. Forgetful people need a system of reminders; persons with poor self-esteem need to feel valued before care is accepted. Individuals who exhibit self-neglect may require treatments for depression, dementia, or any physical problems that are hampering their ability to care for themselves. The individual may need to be monitored so that any excessive deterioration in their health or levels of self-care can be observed and acted upon. Treatment should include home health care that is provided in a way that does not reduce autonomy any more than is essential. Self-neglect may be an indicator that a person would benefit from assisted living or some other form of residential care. These individuals might improve if they have more opportunities for social interaction. If persons are legally determined to be incompetent of making decisions about their own care, they may have a legal guardian appointed and be compelled to accept help. If they are in possession of their mental faculties, they have a right to refuse treatment.
2. **Provide care in a nonjudgmental manner.** The values and beliefs of older adults are often different from those of their caregivers. If the nurse indicates verbally or nonverbally that the older person's beliefs and practices are in some way inferior, the nurse is not likely to be able to convince the person to comply with the desired health practices.
3. **Actively include the patient in planning care, and adapt or modify the care plan so that it is more acceptable to the patient.** Develop all plans with, not for, the older person. Each individual can then incorporate his or her unique culture, beliefs, and values into the plan that is developed. This enables older adults to retain control and responsibility for their own health care. When they "own" the plan and determine the goals, they are more likely to be compliant.
4. **Emphasize the benefits of compliant behavior.** Many aging persons do not comply with recommended health care practices because they do not really believe that compliance will help. If the person has the opportunity to benefit when he or she is compliant, active involvement in care is more likely. For example, if a person with diabetes continually sneaks extra food and therefore frequently has high blood glucose levels, the nurse can demonstrate how much lower the blood glucose level is when the person follows the prescribed diet. If less insulin or fewer injections would be required when the blood glucose level is controlled, these benefits should be stressed. Unfortunately, it is not always possible to see any obvious immediate benefits from compliant behavior.
5. **Acknowledge the aging person's right not to comply with the plan of care.** If an alert older person chooses not to comply with the plan of care despite explanations, teaching, and reminders, the nurse must recognize that this is, in fact, a right of the individual.

The following interventions should take place in the home:

1. **Assess the support system.** In the home setting, it is particularly important to identify the strengths of older adults and the amount of support they receive from friends and family. The likelihood of achieving compliance is far greater when patients are willing to learn and to modify their behavior and when they have others who are willing to help. Individuals who resist intervention and receive little support are likely to continue to have problems with compliance.
2. **Help structure the environment to promote compliance.** Many individuals are noncompliant simply because they are confused or forgetful. Memory devices can catch their attention and verify that critical actions take place. For example, if the person forgets to eat meals, a checklist for the days of the week and the three basic meals can be posted on the refrigerator door. Each time the person fixes a meal, the box is checked. Likewise, special divided containers are available for people who have trouble remembering to take their medication. Medication for an entire week can be prepared by a responsible assistant or nurse. A simple glance in the box lets the person know whether he or she has taken the right medication at the right time. Bold markings on a calendar, preferably one with large print, can be used to mark special events. Signs in bold letters can be posted in appropriate places. For example, "take a drink" can be posted over the sink of a person whose fluid intake is inadequate.