

Chapter 32

Hearing, Speech, and Vision Problems

Lesson 32.1

- Define the key terms and key abbreviations in this chapter.
- Describe the common ear, speech, and eye disorders.
- Describe how to communicate with persons who have hearing loss.
- Explain the purpose of a hearing aid.
- Describe how to care for hearing aids.

Lesson 32.1 (Cont.)

- Explain how to communicate with persons who have speech disorders.
- Explain how to assist persons who are visually impaired or blind.
- Perform the procedure described in this chapter.
- Explain how to promote PRIDE in the person, the family, and yourself.

Hearing, Speech, and Vision

- Hearing, speech, and vision
 - Allow communication, learning, and moving about.
 - Are important for self-care, work, and most activities.
 - Are important for safety and security needs.
- Many people have some degree of hearing or vision loss.
 - Common causes are:
 - Birth defects
 - Accidents
 - Infections
 - Diseases
 - Aging

Ear Disorders

- Ménière's disease involves the inner ear.
 - It is a common cause of hearing loss.
 - Usually one ear is affected.
 - Symptoms include:
 - Vertigo (dizziness)
 - Tinnitus
 - Hearing loss
 - Pain or pressure in the affected ear
 - There is increased fluid in the inner ear.
 - Symptoms are sudden.
 - An attack can last several hours.

Ear Disorders (Cont.)

- Hearing loss is not being able to hear the normal range of sounds associated with normal hearing.
 - Losses are mild to severe.
 - Deafness is hearing loss in which it is impossible for the person to understand speech through hearing alone.
 - Hearing loss occurs in all age-groups.
 - Common causes of hearing loss are damage to the:
 - Outer, middle, or inner ear
 - Acoustic nerve

Ear Disorders (Cont.)

- Treatment involves:
 - Drugs
 - Fluid restriction
 - A low-salt diet
 - No alcohol or caffeine
- Safety is needed during vertigo.
 - The person must lie down.
 - Falls are prevented.
 - The person's head is kept still.
 - Sudden movements are avoided.
 - Bright or glaring lights are avoided.
 - The person should not walk alone.

Ear Disorders (Cont.)

- Risk factors that can damage the ear structures include:
 - Aging
 - Exposure to very loud sounds and noises
 - Drugs (antibiotics, too much aspirin)
 - Infections
 - Reduced blood flow to the ear caused by high blood pressure, heart and vascular diseases, and diabetes
 - Stroke
 - Head injuries
 - Tumors
 - Heredity
 - Birth defects

Ear Disorders (Cont.)

- Temporary hearing loss can occur from earwax (cerumen).
- Hearing is required for:
 - Clear speech
 - Responding to others
 - Safety and awareness of surroundings
- A person may not notice gradual hearing loss.
- Others may notice obvious signs and symptoms of hearing loss.
- Psychological and social changes are less obvious.

Speech

- Hearing is needed for speech.
 - Hearing loss may result in slurred speech.
 - Words may be pronounced wrong.
 - Some persons have monotone speech or drop word endings.
 - It may be hard to understand what the person says.
- Persons with hearing loss may:
 - Wear hearing aids or lip-read (speech-read)
 - Watch facial expressions, gestures, and body language
 - Learn American Sign Language (ASL)
- Some people have hearing assistance dogs (hearing dogs).
 - The dog alerts the person to sounds.
 - Phones, doorbells, smoke detectors, alarm clocks, sirens, and on-coming cars

Hearing Aids

- Hearing aids fit inside or behind the ear.
 - They make sounds louder.
 - They do not correct, restore, or cure hearing problems.
 - The person hears better because the device makes sounds louder.
 - Background noise and speech are louder.
- If a hearing aid does not seem to work properly, try these measures.
 - Check if the hearing aid is on. It has an on and off switch.
 - Check the battery position.
 - Insert a new battery if needed.
 - Clean the hearing aid.

Speech Disorders

- Speech disorders result in impaired or ineffective oral communication.
- Common causes include:
 - Hearing loss
 - Developmental disabilities
 - Brain injury
- These problems are common:
 - Aphasia
 - Apraxia
 - Dysarthria

Speech Disorders (Cont.)

- The person with apraxia of speech cannot use the speech muscles for understandable speech.
 - The person understands speech and knows what to say.
 - The brain cannot coordinate the speech muscles to make the words.
 - The motor speech area in the brain is damaged.
- Dysarthria means difficult or poor speech.
 - It is caused by nervous system damage.
 - Mouth and face muscles are affected.
 - Slurred speech, speaking slowly or softly, hoarseness, and drooling can occur.

Speech Disorders (Cont.)

- Some persons need speech rehabilitation.
 - The goal is to improve the ability to communicate.
 - A speech-language pathologist and other health team members help the person.
 - Improve affected language skills.
 - Use remaining abilities.
 - Restore language abilities to the extent possible.
 - Learn other methods of communicating.
 - Strengthen the muscles of speech.
 - The amount of improvement possible depends on many factors.
 - Cause, amount, and area of brain damage
 - Age and health
 - Willingness and ability to learn

Speech Disorders (Cont.)

- Aphasia is the total or partial loss of the ability to use or understand language.
 - Common causes are stroke, head injury, brain infections, and cancer.
 - Expressive aphasia (motor aphasia, Broca's aphasia)
 - Relates to difficulty expressing or sending out thoughts
 - Receptive aphasia (Wernicke's aphasia)
 - Relates to difficulty understanding language
 - Some people have both expressive and receptive aphasia.
 - Expressive-receptive aphasia (global aphasia, mixed aphasia)
 - The person with aphasia has many emotional needs.

Eye Disorders

- Vision loss occurs at all ages.
 - Problems range from mild loss to complete blindness.
 - Blindness is the absence of sight.
 - Vision loss is sudden or gradual.
 - One or both eyes are affected.

Eye Disorders (Cont.)

- Cataract is a clouding of the lens.
 - A cataract can occur in one or both eyes.
 - Signs and symptoms include:
 - Cloudy, blurry, or dimmed vision
 - Colors seem faded
 - Blues and purples hard to see
 - Sensitivity to light and glares
 - Poor vision at night
 - Halos around lights
 - Double vision in the affected eye

Eye Disorders (Cont.)

➤ Risk factors

- Aging (Most cataracts are caused by aging.)
- A family history
- Diabetes
- Smoking
- Alcohol use
- Prolonged exposure to sunlight
- High blood pressure
- Obesity
- Eye injuries and surgeries

➤ Surgery is the only treatment.

Eye Disorders (Cont.)

- Age-related macular degeneration (AMD) blurs central vision.
 - The disease damages the macula in the center of the retina.
 - Onset is gradual and painless.
 - AMD is the leading cause of blindness in persons 60 years of age and older.

Eye Disorders (Cont.)

- Risk factors—AMD can occur during middle age. However, the risk increases with aging. Besides age, risk factors include:
 - Smoking
 - Obesity
 - Race (Whites are at greater risk than any other group.)
 - Family history
 - Gender (Women are at greater risk than men.)

Eye Disorders (Cont.)

- The following measures can reduce the risk of AMD:
 - Eating a healthy diet high in green, leafy vegetables and fish
 - Not smoking
 - Maintaining a normal blood pressure
 - Maintaining a normal weight
 - Exercising

Eye Disorders (Cont.)

- In diabetic retinopathy, the tiny blood vessels in the retina are damaged.
 - A complication of diabetes, it is a leading cause of blindness.
 - Usually both eyes are affected.
 - Everyone with diabetes is at risk.
 - Treatment
 - The person needs to control diabetes, blood pressure, and blood cholesterol.
 - Laser surgery may help.
 - Another surgery involves removing blood from the center of the eye.
 - The person with diabetic retinopathy may need low vision services.

Eye Disorders (Cont.)

- Glaucoma

- Glaucoma causes damage to the optic nerve.
 - Vision loss with eventual blindness occurs.
- Glaucoma can occur in one or both eyes.
- Onset is sudden or gradual.
- Peripheral vision (side vision) is lost.

Eye Disorders (Cont.)

➤ Persons at risk

- African-Americans over 40 years of age
- Everyone over 60 years of age, especially Mexican Americans
- Those with a family history of the disease

➤ Treatment

- Glaucoma has no cure.
- Prior damage cannot be reversed.
- Drugs and surgery can control glaucoma and prevent further damage to the optic nerve.

Eye Disorders (Cont.)

- Low vision is eyesight that cannot be corrected with eyeglasses, contact lenses, drugs, or surgery.
 - Persons at risk for low vision have:
 - Eye diseases
 - Glaucoma
 - Cataracts
 - Age-related macular degeneration (AMD)
 - Diabetes
 - Eye injuries
 - Birth defects
 - The person learns to use visual and adaptive devices.
 - The devices used depend on the person's needs.

Eye Disorders (Cont.)

- Impaired vision and blindness
 - The many causes of impaired vision and blindness include:
 - Birth defects
 - Injuries
 - Eye diseases
 - Complications of some diseases
 - Amount of vision loss varies.
 - The legally blind person sees at 20 feet what a person with normal vision sees at 200 feet.
 - Loss of sight is serious.
 - Rehabilitation programs help the person adjust to the vision loss and learn to be independent.

Eye Disorders (Cont.)

- Braille is a touch reading and writing system that uses raised dots for each letter of the alphabet.
 - The first 10 letters also represent the numbers 0 through 9.
- Blind and visually impaired persons learn to move about using one of the following.
 - A long cane with a red tip
 - A guide dog

Eye Disorders (Cont.)

- Eyeglasses and contact lenses can correct many vision problems.
- Removal of an eyeball is sometimes done because of injury or disease.
 - The person is fitted with an ocular prosthesis.
 - Some prostheses are permanent implants.
 - If removable, the person may be taught to remove, clean, and insert it.
 - When removed, you need to prevent chips and scratches.
 - You must also protect it from loss or damage.