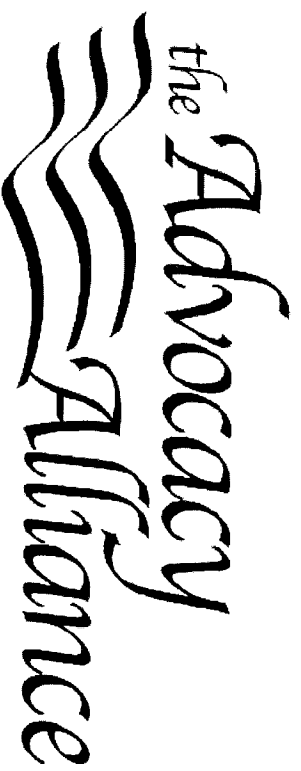


FALL PREVENTION



Health Care Quality Units

Disclaimer

- The information presented to you today is to increase your awareness. It is not intended to replace medical advice or instructions from your health care practitioner or your agency policy.

Objectives

The participant will learn to identify:

- Risk factors for falls
- Complications of falls
- Prevention

Fall Facts

- Among older adults, falls are the leading cause of deaths resulting from injury.
- Falls are the most common cause of nonfatal injuries and hospital admissions for trauma.
- The rates of fall related deaths among older adults rose significantly over the past decade.
- In 2013, the total cost of fall injuries was \$34 billion, this is projected to climb to \$67.7 billion by 2020.

Fall Facts

- One quarter of Americans aged 65 and older fall each year.
- Every 11 seconds, an older adult is treated in the Emergency Department for a fall; every 19 minutes an older adult dies from a fall.
- Men are more likely to die from a fall.
- Women are more likely to have a nonfatal fall injury.

Fall Facts

- 20-30% of the falls have moderate to severe injuries.
- Most common fractures are spine, hip, forearm, leg, pelvis, upper arm and hand.
- Hip fractures cause the greatest number of deaths and lead to the most severe health problems and reduced quality of life.
- Among adults with intellectual disabilities, falls account for up to 50% of all injuries.
- Individuals with intellectual disabilities may not have the protective reflexes or reactions necessary to prevent serious injuries when they fall.

Why People Fall

- Accidental falls related to environment.
- Gait and balance disturbances.
- Dizziness/ Vertigo.
- Confusion.
- Postural Hypotension.
- Decreased Vision.

How We Balance

Our Balance is based on four body systems:

- Visual System which includes the eyes and muscles and parts of the brain that work together to allow people to see.
- Vestibular System which is located in the inner ear and maintains general equilibrium and stops objects from blurring when the head moves.

How We Balance

- Proprioceptive System helps us maintain awareness of our position when walking, running or riding in a vehicle. (Field Sobriety Test)
- Muscular-Skeletal System provides form, support, stability and movement to our bodies.

Environmental Risk Factors

- Floor or ground conditions.
- Wet or slippery surfaces.
- Uneven surfaces.
- Inclined surfaces.
- Throw rugs.
- Clutter
- Lighting

Balance Risk Factors: Vision

Any condition which diminishes visual input:

- Glaucoma
- Cataracts
- Uncorrected visual acuity.
- Brain injury affecting vision.
- Temporary visual changes- i.e. migraine headaches.

Balance Risk Factors: Vestibular

- Disturbances with inner ear and brain.
- Labyrinthitis
- Meniere's Disease
- Acoustic Neuroma
- Vertigo
- Hearing deficits

Balance Risk Factors: Proprioceptive

- Parkinson's Disease
- Brain lesions
- Alcohol abuse
- Hydrocephalus
- Diabetes
- Vitamin B12

Balance Risk Factors: Muscle

- Deconditioning
- Arthritis
- Diabetes
- Dehydration
- Infection
- Edema
- Brain injury or disease.
- Muscle or joint injury.
- Immobility due to another condition.
- Insomnia

Risk Factors: Diseases and Conditions

- Heart disease/ orthostatic hypotension
- Arrhythmias
- Seizures
- Asthma, emphysema
- Stroke, TIA
- Recent Surgery
- Depression
- Incontinence/Urgency
- Osteoporosis
- Sleep Apnea
- Alzheimer's
- Seizures
- Cerebral Palsy
- Multiple Sclerosis

Risk Factors: Medications

- One third of all medications are prescribed for people aged >65
- Taking four or more medications increases risk of falling
- Most commonly prescribed drug types:
 - Cardiovascular
 - Analgesics
 - Gastrointestinal

Medications

The most common 'Over the Counter' medications are:

- Laxatives
- Vitamins
- Antacids
- Analgesics
- Antihistamines

Medications

Drugs cause falls due to either peripheral (i.e. postural hypotension) or central actions (i.e. confusion, parkinsonism, ataxia, sedation).

- Drugs that cause postural hypotension:
- Diuretics
- Antihypertensives
- Antipsychotics
- Drugs for Parkinson's disease.

Medications that have central actions

- Sleeping pills
- Sedatives
- Antipsychotics
- Drugs for nausea
- Drugs for dizziness
- Antidepressants
- Antiepileptics
- Alcohol

Miscellaneous Risk Factors

- Improper shoe and clothing fit.
- Functional or cognitive impairments.
- Previous falls.
- Vision Problems.

Complications

- Abrasions
- Bruises
- Lacerations
- Head Injuries
- Spinal Cord Injuries
- Internal injuries
- Subdural Hematoma
- Death
- Loss of independence
- Change in home
- Need for additional supports
- Social withdrawal

Prevention

- Annual Physical.
- Routine eye exam.
- Eat healthy food.
- Keep active/exercise.
- Know and report medication side effects.
- Wear properly fitted shoes/clothes.
- Proper body mechanics.

Prevention

- Adequate lighting.
- Contrast in paint, furniture, and carpet colors can help with depth perception.
- Avoid floor polish or wax.
- Avoid clutter/small objects on floors.
- Avoid “scatter” or “throw” rugs.

Prevention

- Add contrasting color strips to first and last steps to identify change of level.
- OT/PT evaluation.
- Adaptive equipment.
- Home modifications.

The reason behind the fall...

Is the key to preventing the next one.

- Falls should be reviewed any time there is an injury that results in medical care and, at least annually as part of the ISP process.
- Should include a history of fall circumstances and identification of possible internal and external risk factors.
- It is important to realize that any fall has the potential to result in serious harm.

References

- <https://www.cdc.gov/homeandrecreationalafety/falls/adultfalls.html>