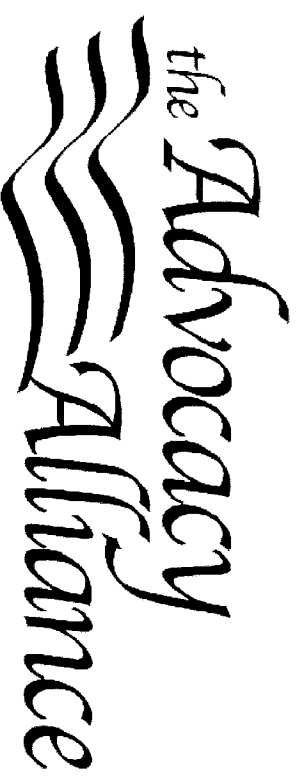


# Aging and Developmental Disabilities



**Health Care Quality Units**

# Disclaimer

- The information presented to you today is intended to increase your awareness.
- This information is not intended to replace medical advice.
- If you are in need of medical advice, please contact your physician.

# Objectives

- The participant will learn:
  - Conditions associated with increased mortality in individuals with developmental disabilities (DD).
  - Medical conditions associated with aging.
  - Health promotion in aging individuals with DD.

# Aging and I/DD

- From the 1930's to 2000, life expectancy in individuals who have DD rose from 18 years to 66 years.
- Mortality rates are highest for those who are immobile, unable to feed self and are incontinent.
- Aging adults with DD face many of the same challenges as other aging adults.

# Chronic Conditions in Individuals with Developmental Disabilities

## Developmental Disabilities

- Heart Disease 35%
- Hypertension 21%
- Visual Impairment 17%
- Thyroid problem 10%
- Diabetes 5%

## Down Syndrome

- Visual impairment 70%
- Thyroid problem 45%
- Heart Disease 27%
- Diabetes 9%
- Hypertension 9%

# Aging and DD: Osteoarthritis

- Degenerative joint disease – cartilage breaks down, joints became swollen and painful.
- Caused by “wear and tear,” previous joint injury, heredity.
- Treated with NSAIDS, non-narcotic and narcotic pain relievers, physical therapy and/or joint replacement.

# Aging and DD: Osteoporosis

- Reduction of bone mineral density significantly increases the risk of bone fractures.
- Fracture rate for individuals with DD is 1.7 to 3.5 times greater than the general population.
- Factors associated with increasing risk of osteoporosis are: immobility, thyroid dysfunction, menopause, Down syndrome, and long term use of anticonvulsant medications.

# Osteoporosis

## Prevention

- Calcium intake (1000-1500 mg/day)
- Vitamin D (400 mg day)
- Weight bearing exercises
- Avoid smoking

## Treatment

- Fosamax, Actonel, Boniva, Forteo, Calcitonin
- Estrogen



# Aging and DD: Vision

- Loss of acuity, decreased visual field, less able to adjust to glare, and decrease in dark adaptation.
- Dry eye, cataracts, glaucoma, diabetic retinopathy, and age-related macular degeneration.
- Vision changes cause function changes:
  - Stumbling
  - Hesitancy
  - Withdrawal from activities
  - Holding objects close

# Aging and DD: Hearing

- Conductive loss – earwax, infection, trauma.
- Sensori-neural loss – poor conduction of sound by nerve to brain (e.g., diabetes, hypertension artery disease).
- Aging causes thickening of eardrum, reduced blood supply to auditory nerve area, and an increase in wax buildup.

# Aging and DD: Heart Disease

- Decreased elasticity of arteries.
- Heart rate decreases due to slower muscle contraction.
- Build up of fat and calcifications in arteries.
- Increased incidence of high blood pressure.

# Aging and DD: Heart Disease

## Signs of heart attack

- Chest discomfort
- Discomfort in arms, back, jaw, and neck
- Shortness of breath
- Nausea
- Dizziness
- Perspiring

## Protect the heart

- Regular, moderate exercise
- Healthy, low sodium, and low fat diet
- Watch for signs of decreased endurance
- Regular blood pressure checks

# Aging and DD: Stroke

- The reduction of blood supply to the brain.
  - Thrombotic — a clot blocks the flow of blood to brain.
  - Hemorrhagic — blood vessel in the brain bursts or leaks.
- Risk factors: High blood pressure and high cholesterol.
  - Smoking
  - Obesity
  - Age
  - Race
  - Diabetes

# Aging and DD: Stroke

- Early Warning Signs
  - Weakness or numbness of face, arm, or leg on one side of body
  - Change or loss of vision in one eye
  - Sudden severe headache
  - Difficulty speaking or understanding speech
  - Dizziness/unsteadiness

# Aging and DD: Respiratory

- **Aspiration Pneumonia**
  - Contents from mouth or stomach enter the lungs causing infection.
  - Caused by swallowing difficulties, dental disease, altered level of consciousness, neurologic and neuromuscular disorders.
  - Symptoms include fever, fatigue, cough, wheezing, chest pain, and shortness of breath.

# Aging and DD: Aspiration Pneumonia

- **Prevention**
  - Modify consistency of food and liquids.
  - Maintain proper position when eating and drinking.
  - Adaptive equipment as needed.
  - Treatment consists of antibiotics, oxygen, positioning, and breathing treatments



# Aging and DD: Chronic Obstructive Pulmonary Disease

- Persistent obstruction of the airway.
- Caused by smoking, frequent lung infections, and exposure to pollutants.
- Emphysema — damaged alveoli causes decreased lung function.
- Bronchitis — inflammation of lining of bronchial tubes.

# Aging and DD: Skin

- Aging causes loss of skin thickness, elasticity and subcutaneous fat.
- Higher risk of skin/tissue injury if individual has impaired mobility.
- Good skin care is essential.
- Reposition regularly as needed.

# Aging and DD: Genitourinary / Gastrointestinal

- Effects of decreased hormones.
- Enlargement of prostate.
- Bladder capacity and muscle tone decreases.
- Digestion slows; less absorption of nutrients.
- May have increase in indigestion and ulcers.
- Require less caloric intake.

# Aging and DD: Dementia

- Syndrome involving progressive decline in brain function.
- Impairment in:
  - Memory
  - Loss of ADL skills
  - Language
  - Personality changes
  - Visuospatial function
  - Executive function

# Aging and DD : Dementias

- Alzheimer’s Disease — brain cell destruction due to “plaques and tangles.”
- Vascular Dementia — blocked blood flow to brain causes brain cell damage.
- Lewy Body Dementia — caused by abnormal protein deposits.
- Pick Disease.
- Mild Cognitive Impairment.

# Aging and Down Syndrome

- Higher risk of Alzheimer's Disease at a much earlier age.
- Normal aging processes at an earlier age.
- Higher incidence of joint problems (neck, knee, hip).
- Increased risk of heart valve disease.
- Overweight and obesity.

# Aging and Cerebral Palsy

- Severity of Cerebral Palsy symptoms is related to life expectancy rate.
- Digestion problems as a result of abnormal movement of food through throat, stomach, and intestinal tract.
- Abnormal muscle tone resulting in joint and muscle pain, joint deformities, and bowel/bladder dysfunction.

# Aging and DD: Caregiver Interventions

- When changes in behavior and mental function occur take steps to investigate all possible causes:
  - Medical illness
  - Reaction to medications
  - Mental health problems



# **Aging and DD: Caregiver Interventions**

- Be an advocate for the individuals for whom you care. Not all physicians and healthcare professionals have experience with aging and I/DD.
- Be alert for changes and report.
- Promote healthy living.