

AGING AND DEVELOPMENTAL DISABILITIES

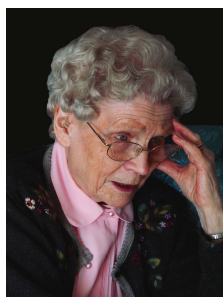
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Objectives

- Discussion about aging
- Aging and Developmental Disabilities
- Supporting people with Developmental Disabilities as they age
- Transition planning

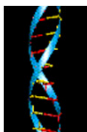
Aging

- Some age related aging changes are obvious
- Some are not
- Genetics
- Environment
- Lifestyle
- Chronological age is not the same as biological age



Biological Processes of Aging

- Cell life is organized by our genetic code
- Different cells make up the different organs of our bodies (heart, stomach, brain, bones, skin)
- As cell life ends new cells replace the old cells
- Over time cell death outpaces cell reproduction
- We have fewer cells as we age
- Over time, we are less able to repair wear and tear on our bodies



Biological Processes of Aging

- Organs age at different speeds
- Different people age at different rates
- The presence of disease or disability may affect aging
- Genetics, environment and lifestyle



Biological Processes of Aging

Cellular changes explain some of the common afflictions of aging:

- Diminished eyesight
- Cataracts
- Hearing loss
- Osteoporosis
- Decreased muscles
- Arthritis
- Heart disease
- Stroke
- Cancer

Theories About Aging

- Biological clock – genes
- Decreased hormones
- Inability to manage cell waste over time (lipofuscin binds fat and proteins and interferes with cell function)
- Changes to collagen – body's glue – pliable in youth, rigid with age

Aging and Developmental Disabilities

- People with Developmental Disabilities are living longer
- Genetics, environment and lifestyle impact this population
- As in the general population, promoting healthy aging begins by supporting a healthy youth



Signs and Symptoms of Aging

Throughout the aging process, individuals with DD show less of a decline in verbal ability with more deterioration in performance skills and behaviour



Changes Associated with Aging

- Dementia
- Heart disease
- Diminished eyesight
- Hearing loss
- Osteoporosis
- Arthritis
- Decrease in muscle mass
- Polypharmacy
- Stroke
- Cancer
- Psycho-Social changes

Changes in People with Developmental Disabilities and Aging

- Dementia
- Cardiac Anomalies
- Reduced vision or hearing
- Musculoskeletal decline
- Pain
- Decrease in muscle mass
- Constipation or urine retention
- Polypharmacy
- Slowing of the thyroid gland
- Depression

Dementia

- Some of the symptoms described for the general public may not occur or may not occur in the same sequence of change
- The initial symptoms often appear gradually then progressively worsen - no sudden changes
- The symptoms may be expressed differently due to limitations of the individual's functioning
- Change from base line of their normal functioning level is the best indicator

Dementia and Developmental Disabilities

The diagnosis of dementia is challenging because:

- Background intellectual impairment
- Inappropriateness of tools used to detect dementia in the general population
- Presence of unrecognized medical conditions
- Diagnostic overshadowing

Downs Syndrome and Dementia

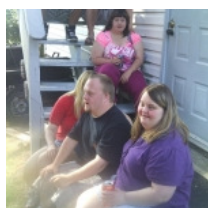
- Generally dementia of the Alzheimer's type in Downs Syndrome
- Type of dementia differs between Downs Syndrome and other types of intellectual disability
- Average onset age about 53 for Downs Syndrome – late 60s for others

Prevalence of Alzheimer's Dementia (AD)

- All individuals with Down's Syndrome show the neuropathological changes of AD by age 40
- Most suffer cognitive decline by age 60
- Alzheimer disease (AD) pathology may develop progressively with age
- Some individuals with DS do not develop dementia despite extensive AD neuropathology

Changes that Might Indicate Dementia

- Noticeable decline in learned skills
- Increase in stereotypical behavior
- Changes in mental processes -- thinking, reasoning and judgment
- Seizures when none were previously present (84%)



Changes that Might Indicate Dementia

- Memory loss (less obvious)
- Weight loss (sometimes desirable, significance ignored)
- Decreased skills in activities of daily living leading to:
 - Increased dependency
 - Personality changes
 - Apathy
 - Loss of conversation skills



Cardiac Anomalies

- Mitral valve prolapse is reported to occur in 46% to 57% of adults with DS
- Can lead to an increased risk of endocarditis, cerebrovascular accident (CVA), more severe mitral value prolapse, and heart failure (CHF)
- Can occur in adults with DS who have no previous history of cardiac pathology

Cardiac Anomalies

Early signs of cardiac anomalies include:

- Fatigue,
- Irritability
- Weight gain
- Dyspnea with physical activity
- Refusing to participate

Cardiac Anomalies



Signs and symptoms of progressive cardiac anomalies may be similar from a behavioural perspective, to the progression of dementia

Cardiac Anomalies

Lower cardiovascular capacity may be secondary to:

- ⦿ Lower muscle strength
- ⦿ Thyroid disorders
- ⦿ Hypotonic muscle tone
- ⦿ Higher incidences of obesity
- ⦿ Impaired sympathetic response to exercise

Vision

- ⦿ Cataracts
- ⦿ Blepharitis (inflammation of the eyelid)
- ⦿ Excessive myopia
- ⦿ Increase frequency with increasing age

Hearing

- ⦿ High prevalence of middle ear infections and conductive hearing loss
- ⦿ The prevalence of hearing impairment increases with age
- ⦿ The loss of either hearing or vision can have a detrimental effect on adaptive behavior in adults with DD

Sensory Impairment

- ⦿ Hearing and/or vision loss manifest as:
- ⦿ Reduced interest in surroundings
- ⦿ Increased lethargy
- ⦿ Decreased responsiveness
- ⦿ Increased agitation
- ⦿ Noticeable decline in learned skills
- ⦿ Increase in stereotypical behavior

Sensory Overload

- ⦿ Too much activity at the same time - radio, TV, conversation and other activities
- ⦿ Too much activity around eating
- ⦿ Instructions too complex - "sit down and eat"
- ⦿ Fear of water - showers and bath
- ⦿ Activities may be too overwhelming - field trips, group projects

Sensory Impairment/Overload

- ⦿ As people with developmental disabilities age
- ⦿ Changes to sensorium leads to:
- ⦿ Changes in behaviour
- ⦿ May be mistaken for dementia resulting in:
- ⦿ Changes in support
- ⦿ Changes in living arrangements



Musculoskeletal Decline

- ⦿ Higher risk for developing osteoporosis
 - Down syndrome is an independent risk factor for osteoporosis
 - Poor nutrition
 - Lack of exercise
 - Long-term wheelchair use
- ⦿ Long-bone fractures
- ⦿ Compression fractures of the vertebral bodies
- ⦿ Arthritis

Musculoskeletal Decline

- ⦿ Decline in mobility may be attributed to the onset of dementia
- ⦿ Reduced range of motion may manifest as lethargy or loss of interest
- ⦿ Check footwear
- ⦿ Physical ability screen – includes posture, joint range of movement and gait assessment

Pain

- ⦿ Some conditions common in developmental disabilities that cause pain:
- ⦿ GERD
- ⦿ Arthritis
- ⦿ Gingivitis and dental caries
- ⦿ Constipation

Pain

- ⦿ Changes in behaviour may indicate pain:
- ⦿ Reduced interest in surroundings
- ⦿ Increased lethargy
- ⦿ Decreased responsiveness
- ⦿ Increased agitation
- ⦿ Noticeable decline in learned skills
- ⦿ Increase in stereotypical behavior



Decrease in Muscle Mass

- ⦿ Increase in dysphagia due to changes in:
 - ✓ Tone – May be high or low
 - ✓ Timing – May be delayed or irregular
 - ✓ Coordination – May not be functional



Nutrition and Hydration

- ⦿ As people with developmental disabilities age
- ⦿ Poor nutritional status leads to:
- ⦿ Changing behaviour
- ⦿ Decreased energy
- ⦿ Obesity
- ⦿ Poor cell replenishment
- ⦿ Premature aging
- ⦿ Deteriorating health
- ⦿ Death



GERD

- Gastroesophageal Reflux Disease
- The words “I have heartburn” – Gold standard for diagnosis
- Changes in behaviour around eating
- Cough-esp. nighttime
- Food refusal
- Sometimes asymptomatic

Constipation

- ✓ Poor nutrition and/or hydration
- ✓ Lack of exercise
- ✓ Medicinal causes(anticonvulsants)

Constipation

- As people with developmental disabilities age
- Constipation leads to:
- Pain
- Behaviour changes associated with discomfort
- Incontinence
- Bowel obstruction



Polypharmacy

- Definitions include:
- - use of more drugs than is clinically necessary
- -administration of many drugs together
- -administration of excessive medication
- -the practice of prescribing multiple drugs to people suffering from more than one malady.



Polypharmacy

- As people with developmental disabilities age
- Medication is added to treat multiple ailments. This leads to:
- Changes in behaviour
- Reduced participation in ADL's
- Decreased mobility
- Swallowing problems
- Diagnostic overshadowing



Thyroid Dysfunction

- Risk for developing both hyperthyroid and hypothyroid conditions
- Aging increases risk
- Hypothyroidism is more common

Hypothyroidism

Frequently observed symptoms of hypothyroidism in individuals with DS:

- Decreased energy
- Decreased motivation
- Weight gain
- Constipation
- Bradycardia
- Dry skin

Hypothyroidism

- Untreated hypothyroidism often can lead to symptoms that mimic a decline in cognitive skills
- Individuals may be misdiagnosed as having Alzheimer's Disease

Depression

- Additions
- Losses
- Separations
- Deaths
- Teasing or bullying
- Being left out
- Disappointments
- Stress
- Other triggers (Anniversaries, holidays)
- Issues regarding sexuality
- Inability to verbalize
- Life transitions (moving out, leaving school, staff changes)
- Poverty

Depression

For some adults, a decline in cognitive or adaptive functioning can be associated with depression and labelled 'pseudodementia'

Depression can present with behavioural changes

Symptoms can be effectively reversed with the use of antidepressants

Depression

Review psychiatric history

Assess:

- Relationships
- Sensory deprivations –vision, hearing, tactile
- Communication issues
- Sensory triggers
- Environment physically demanding
- Appropriate activities – overstimulation/understimulation
- Mobility problems or physical restrictions

Sleep Apnea

- Reported to occur in approximately 50% of adults with DS
- Evidence in people with DD without DS
- Sleep apnea may lead to depression, paranoia, irritability, or other behavioral changes

Strategies for Supporting People as They Age

- Promote health no matter what age
- Improve nutrition and exercise
- Understand aging
- Learn about specific syndromes – aging presents differently
- Seek the right kind of help



Strategies for Supporting People as They Age

Baseline of ADL, changes in behavior, memory, and cognitive function and evaluation by age 40

Repeated regularly to determine any deterioration in these functions

For individuals with Down's Syndrome be established at age 30 and repeated annually

Strategies for Supporting people as They age

Maximize opportunities to live as full and healthy a life as possible by keeping up interests in:

- Work
- Recreation
- Friends and family

Maintain

- Good health, diet and fitness,
- Regular medical checkups.



Transition Planning

- There are many transitions in life
- Transition for the older adult is not just joining seniors' programs
- Life Plan – Engage the circle of care participants early
- Include Life Plan in annual conferences

Transition Planning

- Supports the individual and his/her quality of life as he/she ages
- Involves the individual and the circle of care participants in planning
- Includes support change planning
- Includes day support changes
- Considers moving and/or aging in place
- Ensures the individual is the center of plan

⦿ QUESTIONS???
