Meeting the Needs of Aging Persons with Developmental Disabilities

Cross Network Collaboration for Florida

Aging in Individuals with a Developmental Disability

Module 3

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Purpose of Module 3

- Understand aging as a normal process
- Dispel myths about aging and developmental disabilities
- Recognize how aging may increase risk factors for disease



- Understand aging with developmental disabilities is the overlap of aging and disabilities
- Recognize how medications may affect adults with developmental disabilities

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What Is Aging?



- Determined by interaction of three factors
 - Life-long choices (diet, physical and mental exercise, self-esteem)
 - Environment (physical, cultural and social)
 - Genetics
 - Successful aging from positive genes
 - Negative aging from life-long or late-onset gene

Aging Changes

- Age related: Common to everyone
 - Interventions may slow decline
- Age associated: Not common to everyone
 - Associated with disease, disorders, poor lifestyle choices, negative environment
 - Controlled by individual choices

Aging in Adults with Developmental Disabilities

- Interaction of pre-existing disability with factors of aging may result in:
 - Increased risk factors with earlier onset of symptoms
 - Increased risk for inappropriate medical treatment
 - Increased vulnerability to a more restrictive environment

Aging in Adults with Developmental Disabilities

- Interaction of pre-existing disability with factors of aging may result in:
 - Increased challenging behaviors due to communication difficulties
 - Increased cost for treatment and interventions
 - Increased staff/family frustration due to lack of communication and knowledge

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Myths About Aging and Developmental Disability



- All individuals with developmental disabilities experience earlier onset of aging - False
- All adults with Down syndrome will exhibit the symptoms of Alzheimer's disease - False
- Majority of adults with developmental disabilities live in supervised residential care facilities - False

Consequences of Myths

- Affect quality of assessment and intervention
- Influence attitudes of staff, family, and providers
- Limit available choices and resources
- Affect quality of life

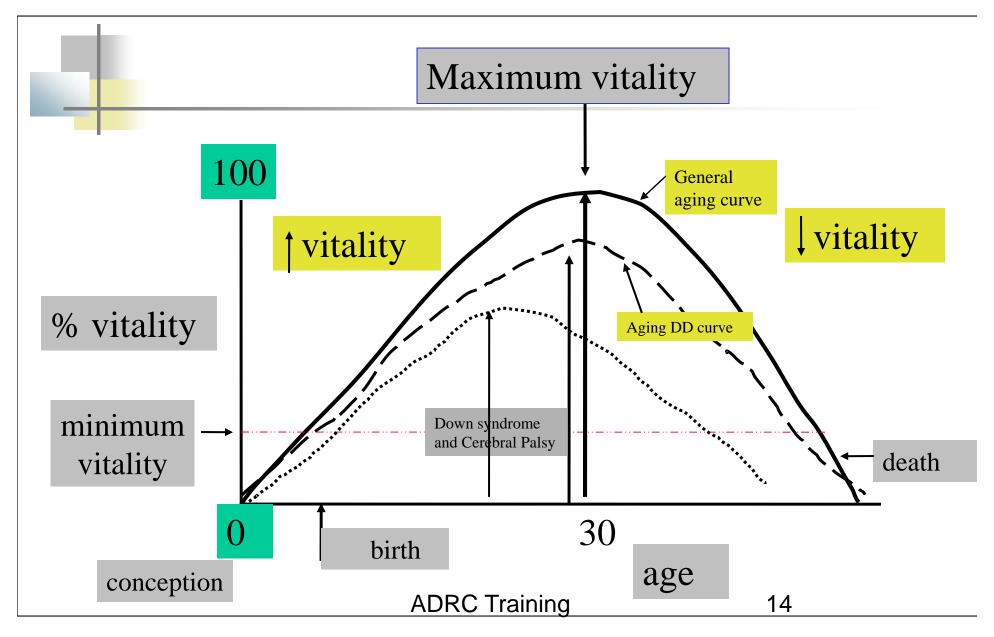
Myth 1 – Early Onset of Aging

- Persons with mild to moderate developmental disabilities and the general adult population experience:
 - Same rate and age-related changes
 - Similar longevity
 - Individual aging influenced by genetics and lifestyle choices

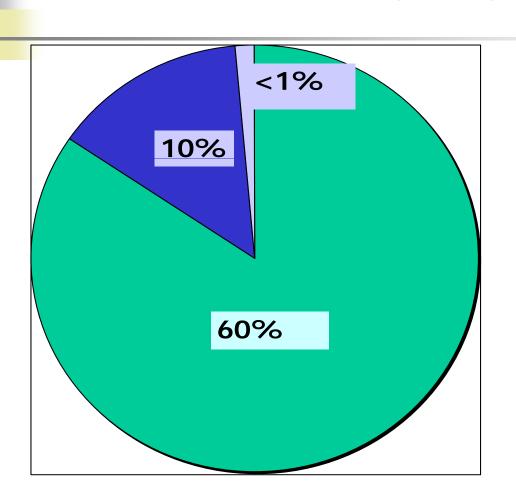
Myth 1 – Early Onset of Aging (Continued)

- The older adult with Down syndrome or cerebral palsy also experiences:
 - Same aging changes <u>but</u> earlier onset
 - Same rate of change <u>but</u> compressed due to shorter longevity

Aging Curve



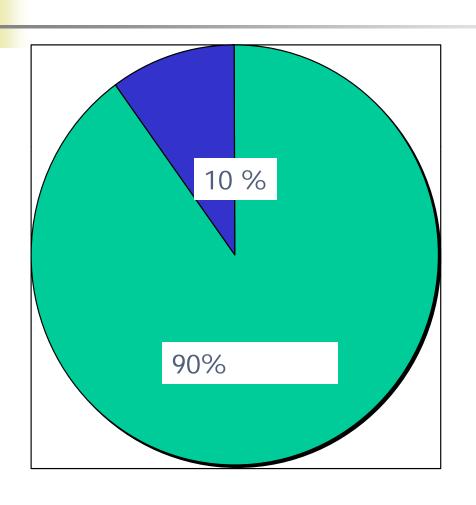
Myth 2 — Down Syndrome and Alzheimer's Disease



- 60% of DS with AD by 60
- 10% of DS with AD by 70
- <1% of DS with AD by 80

Janicki, M.P. & Dalton, A.J. (2000). Prevalence of dementia and impact on intellectual disability services. *Mental Retardation*, 38, 277-289.

Myth 3 – Living Situation



- 90% Living at home
- 10% Living in residential care

Braddock, D., Felce, D., Emerson, E. & Stancliffe, R.J. (2001). *Mental Retardation and Developmental Disabilities Research Reviews*, 7, 115-121.

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Aging in Individuals with a Developmental Disability

Differentiate "Normal" Aging Changes from Disease

- Determine types of interventions to best meet needs
- Determine appropriate services
- Develop activities appropriate for agerelated cognitive/physical changes
- Maintain quality of health through increased awareness of changes

Pre-existing Developmental Disability Aging Effects

- Likelihood of "diagnostic over-shadowing"
 - Changes related to the disability result in inappropriate or no interventions
 - Pre-existing cognitive challenges assumed to be symptoms of dementia
 - Pre-existing disability may be misdiagnosed as disease

Risk from Inappropriate Intervention

- Reduced vitality and quality of life
- Modified aging process
- Increased misdiagnosis for other diseases (especially Alzheimer's disease)
- Increased behavioral changes

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Age-Related Changes Everyone Experiences

Sensory Changes Affect the Older Adult

- Reduced sensory acuity
- Increased masking of sensory impairments
- Reduced potential for quality of life and independence
- Increased social isolation

How Is Hearing Affected by Aging?

- Increased loss of high frequency sounds (children and females voices in particular)
- Increased interference with hearing
 - Background sounds interfere with communication
 - Increased tinnitus ringing in the ears

How is Vision Affected by Aging?

- Increased glare (light reflection) sensitivity
- Increased difficulty adjusting to reduced lighting
- Increased difficulty with busy visual patterns



- Increased risk of falls
- Decreased social interaction
- Increased inappropriate behavior
- Decreased verbal communication
- Increased misdiagnosis of dementia

Other Age-related Changes in Older People

- Reduced muscle mass by 15%
 - Increased risk of falls
 - Decreased ability for physical activities
- Decreased thyroid function
 - Decreased body temperature
 - Increased symptoms of acute dementia

Other Age-related Changes in Older People

- Reproductive system (male)
 - Enlarged prostate reduced flow of urine and reduced ability to urinate
- Reproductive system (female)
 - Decreased estrogen menopause
 - Increased bone loss
 - Increased risk of depression
 - Increased risk of heart disease
 - Increased short-term memory impairment

Lesser Age-related Changes in Older People

- IQ remains the same or increases
- Personality remains the same
- Ability to learn new skills remains the same
- Long-term memory remains the same
- Little change in memory recall

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Early Aging Changes Experienced by Adults with Down Syndrome and Cerebral Palsy

Early Aging Down Syndrome and Cerebral Palsy Risk Factors

- Increased early symptoms
- Increased severity of symptoms
- Increased symptoms may be:
 - Overlooked
 - Assumed to be "normal" aging
 - Misdiagnosed as dementia

Note: An individual with Down syndrome must also have a diagnosis of retardation to be eligible for APD services.

Early Aging in Down Syndrome Adults

- Shorter longevity
- Reduced cognitive and physical function
- Increased behavioral problems
- Changes may <u>mimic</u> or <u>mask</u> diseases or disorders

Early Aging in Down Syndrome Adults

- Slowing of the thyroid (hypothyroidism) increases risk for:
 - Increased feelings of cold, tiredness, lethargy
 - Decreased appetite
 - Increased need for sleep
 - Increased short-term memory impairment
 - Increased confusion

Early Age-related Changes in Cerebral Palsy Adults

- Decreased muscle strength after many years of no change
- Increased risk for urinary tract infections and incontinence
- Increased difficulty in swallowing
- Reduced stamina
- Increased fatigue

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Adverse Drug Reaction Risk Factors in Adults with Developmental Disabilities

Medication Risk Factors in Older Adults

- Increased levels of medications in the blood for longer times
- Increased use of multiple medications
- Little understanding of medication interaction
- Increased adverse drug reactions (ADRs) masking or mimicking dementia

Medication Risk Factors in Older Adults

- Increased dosages of medications
- Few studies of medication use in older adults with developmental disabilities
- Few health care providers trained to identify adverse effects of medications

Additional Risk Factors Affecting Drug Reactions in Older Adults

- Population variations due to gender, race, ethnicity
 - Increased side effects from anti-depressants Prozac & Paxil are twice that in Caucasions than in Hispanics
 - Increased Tardive Dyskinesia from antipsychotic drugs in African-Americans
 - Increased response to anti-psychotic drugs by Asians
 - Little knowledge of how medications affect females

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Additional Risk Factors Affecting Drug Reactions in Older Adults

- Individual variations in response
 - Age-related differences
- Disability specific variations in response
- Older adults with developmental disabilities will "age into" medications with long-term use

Adverse Drug Reactions Affect Body Function

- Examples of biological changes
 - Increased/decreased blood pressure
 - Increased urine retention or incontinence
- Examples of behavioral changes
 - Increased risk for depression
 - Increased risk for paranoia

Adverse Drug Reactions Affect Body Function

- Examples of neurological changes
 - Increased change in sleep patterns
 - Increased risk for seizures
- Examples of decline in muscle coordination
 - Increased risk for muscle tremors
 - Decreased coordinated muscle movement

Adverse Drug Reactions That Mimic Dementia

- Increased agitation
- Increased anxiety
- Increased behavioral changes
- Increased decline in cognitive functioning

Adverse Drug Reactions That Mimic Dementia

- Decreased communication skills
- Increased disorientation to person, place or time
- Increased loss of interest in normal activities

Adverse Drug Reactions That Mimic Dementia

- Increased risk for confusion
- Increased risk for delusions
- Increased risk for depression, sadness
- Increased risk for unexplained excitability
- Increased risk for restlessness, wandering



Summary of Module 3

- Myths may affect how services are applied
- Aging is experienced by everyone
 - Aging is an individual process
 - Influenced by genetics and lifestyle
 - Disabilities over-lay influences on aging



- Increased risk of mimicking or masking diseases or disorders from early aging in adults with Down syndrome and cerebral palsy
- Increased risk for adverse drug reactions that mimic or mask diseases

Group Discussion

Questions