

Introduction to Developmental Disabilities for Nutrition and Dietetic Students: A Primer

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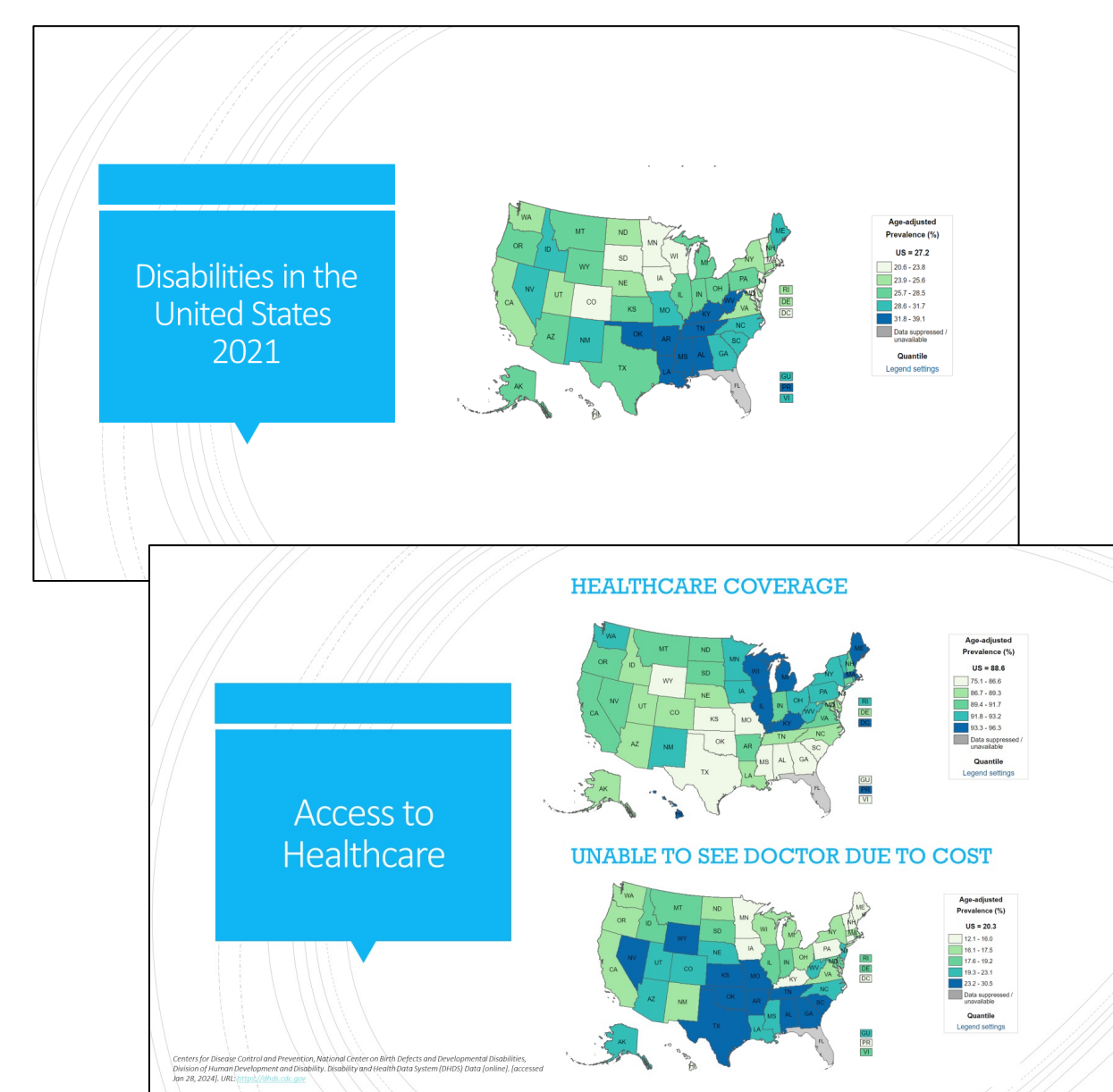
Background

- Nutrition and dietetic students must be competent to provide nutrition therapy across the lifespan

- They will encounter individuals and communities with a wide range of health and disease

- Objective was to develop a presentation introducing developmental disabilities to nutrition and dietetic students

Statistics



Disability Overview

Disability – what does it mean to you?

Broad Umbrella Term
Impairment
Limitations on activity
ADL restrictions

World Health Organization
"The interaction between individuals with a health condition (such as Cerebral Palsy, Down Syndrome, and depression), with personal and environmental factors including negative attitudes, inaccessible transportation, and limited social support"

Causes of Disability

Birth trauma	Premature birth	Metabolic disorders	Genetic disorders
Prenatal exposures	Chronic diseases	Injury	Lead exposure

Policy Overview

What is Policy?

- According to the CDC, policy is "a law, regulation, procedure, administrative action, instruction, or voluntary practice of governments and other institutions"
- Can be local, state or federal
- Has a profound impact on the health of individuals, communities, and populations
 - Clean water
 - Newborns tobacco testing
 - Tobacco regulation
 - Car safety – seat belts, air bags

Major Federal Policies

Medicaid

- 1981 amendment to the Social Security Act
- Government health insurance program
 - Low-income individuals
 - Medically needy
 - Eligible program women and children
 - Age-65, blind or disabled individuals
 - Subsidized long-term care services
- Access to support services
- Joint program between federal and state governments
 - Coverage depends on what state you live in
- 32 Medicaid – 50/50 rule
- Administered by managed care organizations

Mandatory Medicaid Benefits

- Physician, nurse practitioner services
- Acute care and ambulatory hospital services
- Long-term care services
- Federal qualified health and mental health centers
- Home health care
- Mental health services
- Laboratory and x-ray
- Home modification and family planning
- EMT – non-emergency ambulance, air, and treatment
- Health and developmental laboratory, physical exams
- Age-appropriate rehabilitation
- Lead screening
- Treatment for vision, hearing, and dental emergencies

Neurodevelopmental Disabilities Covered

Fragile X Syndrome

- Genetic mutation in the FMR1 gene
 - Increased or absent FMR1 leads to abnormal brain development
- X chromosome-linked disorder
 - More common in males
 - Often have more severe symptoms
- Most common genetic cause of ID and ASD
- Diagnosis requires genetic testing

Fetal Alcohol Spectrum Disorders

- 100% preventable
- Caused by exposure to alcohol during pregnancy
- Signs/symptoms include:
 - Distinctive facial features
 - Learning disabilities
 - Intellectual disabilities
 - Speech and language trouble
 - Microcephaly
 - Low body weight
 - Poor growth

Intellectual Disability

- Previous term of "mental retardation" no longer used
- More common in males
- Racial disparities
- Associated with other developmental disabilities
 - Down syndrome
 - Autism
 - CP
 - Fragile X syndrome
 - Fetal Alcohol Syndrome
- Challenges with learning and daily functioning
 - Communicating basic needs
 - Performing self-care
 - Delayed development and learning compared to peers
 - Participation in school and community settings

ASD Diagnostic Criteria

SOCIAL COMMUNICATION AND INTERACTION

- Social-emotional reciprocity
- Nonverbal behaviors for social communication and interaction
- Relationships – establishing, maintaining, and understanding

RESTRICTIVE AND REPETITIVE BEHAVIORS

- Repetitive or stereotyped motor movements, objects, or sounds
- Insistence on sameness, inflexible adherence to routines, or ritualized patterns of behavior (stereotyped motor movements)
- Highly restricted, fixed interests that are abnormal in intensity or focus
- Hyper- or hypo-sensitivity to sensory input or unusual interest in sensory aspects of the environment

Attention Deficit Hyperactivity Disorder

- Difficulty paying attention
- Impulsive behaviors
- Hyperactive
- All can lead to disruption at mealtimes
- Diagnosis is complex
 - Based on number and duration of inattentive symptoms and impulsive-hyperactivity symptoms present
 - Present for at least 6 months
 - Disruptive and inappropriate for developmental age

Cerebral Palsy (CP)

- Group of conditions that cause permanent motor impairments
 - Movement
 - Posture
 - Tone
- 4 types of cerebral palsy
 - Spastic – Most common (80%)
 - Increased muscle tone = stiffness
 - Abnormal body movements
 - Dyskinetic
 - Abnormal involuntary and irregular movement of the extremities
 - Dystonic repetitive movements of the trunk
 - Ataxic
 - Affects balance and coordination
 - Mixed

Nutritional Challenges in ASD

- Limited food acceptance/variety
 - Sensory issues
 - Behavioral issues
- Restricted diets
 - Gluten-free and/or casein-free diets
- Gastrointestinal
 - Constipation which can manifest as behaviors
 - Diarrhea
 - Gastroesophageal reflux disease (GERD)
 - Abnormal GI motility
- Nutrient deficiencies
 - Vitamin D
 - Calcium
 - Fiber

Nutritional Concerns in ADHD

- Underweight/Malnutrition
 - Mealtime disruptions
 - Medication side-effects
- Overweight/Obesity
 - Increased appetite

Nutritional Challenges in CP

Risk Factors

- Gastrointestinal issues
- Medication side effects
- Drug-nutrient interactions
- Oral motor dysfunction
- Prolonged feeding/mealtimes
- Poor dentition

Impaired growth, underweight, malnutrition, dehydration

Trauma Informed Care

People with IDD are more likely to experience trauma

- Neglect – physical and emotional
- Abuse – physical and sexual
- Use of restraints and isolation for behaviors
- Teasing and/or bullying
- Historical institutionalization and segregation
- Discrimination – racial, socioeconomic, language
- Medically complex
- Crime
 - 89% of non-fatal violent crime
 - 4x higher than people without disabilities
 - Violent crime in people with cognitive disabilities > other types of disabilities
 - Lower rates of sexual assaults reported to police

A Trauma Informed Approach to Care

How to Implement?

- Acknowledge the experience of trauma
- Focus on the whole person rather than individual health services
- Provide healthy relationships with staff
- Avoid triggering the person to further trauma
- Be aware that each individual's experiences could be unique
- Build the cultural identity
- Recognize your own implicit bias