

Practical Considerations Related to Pharmacology and Developmental Disabilities

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Outline

- Common presentations of DD
- Assessment strategies with individuals with DD
- Typical medications for this population
- Pharmacology options
- Behavior changes and possible explanations
- Communication barriers with clients
- Communication tools for clients and caregivers
- Coping with resistance to assessment and treatment

United States Frequency of ID of All Degrees

Ranges from 1.6-3% of the population



Health & ID

Health problems interfere with quality of life:

- Epilepsy
- Immobility
- Significant Oral Motor Incoordination/
Dysphagia/Aspiration
- Respiratory disease is the most prevalent cause of death among individuals with profound ID
- Mild cognitive impairment life expectancy is not known to differ from that of the general population.

Comorbid Psychiatric Conditions

- Diagnosed more frequently
- Schizophrenia may have a prevalence of 3%
- Bipolar illness has a 2- to 3-fold greater prevalence in the cognitively impaired than in the general population
- Attention deficit/hyperactivity disorder (ADHD) is diagnosed in 8-15% of children and 17-52% of adults with ID
- Self-injurious behaviors require treatment in 3-15%, particularly in the severe range of ID
- Major depression, autistic spectrum disorders, obsessive-compulsive disorder, anxiety disorders, conduct disorder, tic disorders, and other stereotypic behaviors are diagnosed more commonly

Emotional/Behavioral Problems

- 5 times the rate of emotional or behavioral disorder
- ID compounded by epilepsy can increase the risk of a psychiatric problem to over 50%
- Occult visual and auditory deficits occur in 50% of those with ID
- STDs, Hepatitis B, and Helicobacter pylori infection (H. Pylori) are increased significantly

Emotional/Behavioral Problems

- 1 in 5 also has cerebral palsy (CP)
- As many as 20% have seizures
- GI complications: feeding dysfunction, excess drooling, reflux esophagitis, and constipation
- GU complications: urinary incontinence and poor menstrual hygiene
- Profound social morbidity: lost wages, dependence on social services, impaired long-term relationships, and emotional suffering.

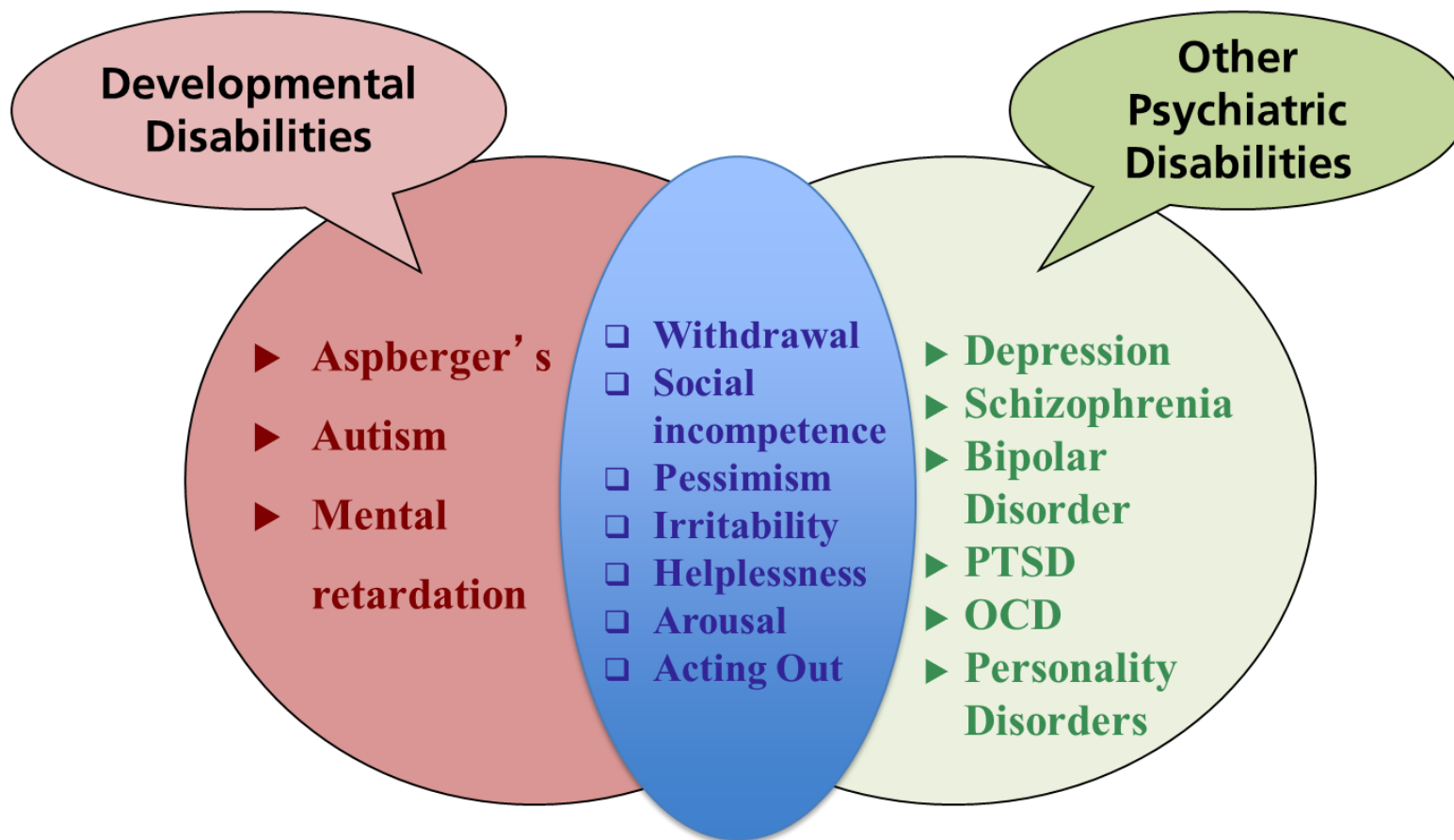
Psychopathology

- Aggression
- Self-injury
- Defiance
- Inattention
- Hyperactivity
- Anxiety
- Depression
- Sleep disturbances
- Stereotypic behaviors
- Before psychopathology can be identified, infants and toddlers with ID are more likely to have
 - Difficult temperaments
 - Noncompliance
 - Hyperactivity
 - Disordered sleep
 - Colic
 - Poor social skills
 - Delays in play skills

The Overlapping Symptoms of Developmental Disabilities and Other Psychiatric Disorders



Overlapping Symptoms



Treatment

- No treatments are available specifically for cognitive deficiency
- Pharmacologic enhancement of cognition is an area of interest
 - ▶ Research on such nootropic (i.e., knowledge-enhancing) compounds is limited

Treatment

- Complex habilitation plan
- Special educators
- Language therapists
- Behavioral therapists
- Occupational therapists
- Community services that provide social support and respite care for families

Medications

- Target psychiatric disease/behavioral disturbances
- Vitamin/mineral therapies are popular, but efficacy has not been established
- Antioxidant supplements with Down Syndrome is of theoretical benefit, but has not yet been tested vigorously
- CNS stimulants (psychostimulants methylphenidate and dextroamphetamine appear to enhance dopamine and norepinephrine activity in the CNS) - The most common class of drugs prescribed with as many as 50% ADHD/ADD

Why We're Talking About Medications

- To understand the basics of psychiatric medications (psychopharmacology)
- To recognize likely treatment options for a set of symptoms or problems
- To be able to plan for main effects and side effects that are possible with psychiatric treatment

Examples of Why Psychiatric Medications May be Necessary

- Help minimize depressive symptoms
- Help clarify thinking
- Help reduce anxiety
- Help the client have better control over impulses
- Help the client feel better
- Help keep functioning from slipping away

Medicate the Symptom

- Inattention
- Excitability
- Focus
- Aggression
- Sleep problems
- Depression
- Psychosis
- Disorganized thinking

Behavioral Problems Accompany All Symptoms

- Hallucinations, Delusions, Disorganization, Depression, Mood Variations, and Anxiety all affect:
 - ▶ Activities
 - ▶ Interactions
 - ▶ Sleep
 - ▶ Eating

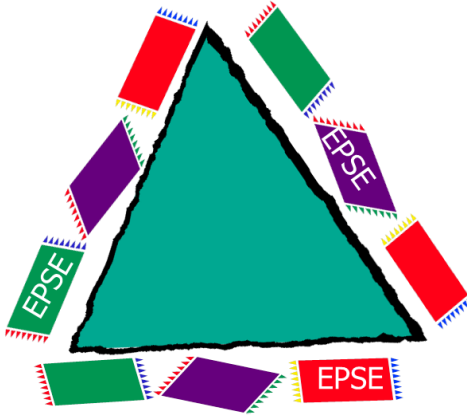
Assess for Symptoms of Major Mental Illness

- Schizophrenia
- Depression
- Bipolar Disorder
- Anxiety

Side Effects

The reason so many people do not like to take their medications as prescribed





Extra Pyramidal Side Effects (EPSE)

Side Effects Seen Particularly with Psychiatric Medications



ExtraPyramidal Side Effects (EPSE)

- Dystonia
- Akathisia
- Drug-induced Parkinsonism

Tardive Dyskinesia (TD)

- TD Late onset (after at least 3 months of treatment) during the course of treatment with antipsychotics
- TD Frequently associated with irreversible abnormal movements, or a neurological syndrome.

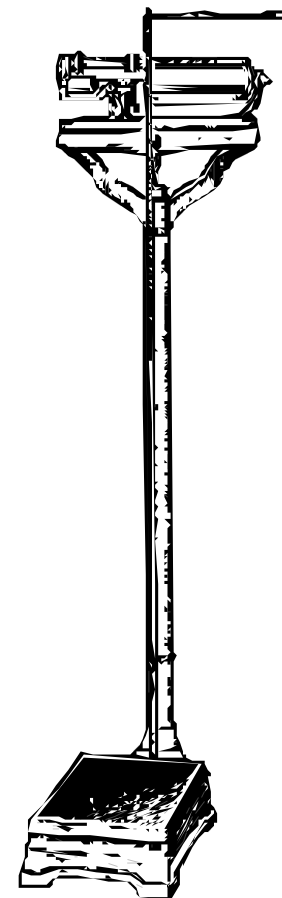
Anticholinergic Side Effects

Generally Drying in Physiologic Effect



Additional Side Effects

- Neuroleptic Malignant Syndrome (NBS)
- Sexual Dysfunction
- Sleep Disturbances
- Weight Gain – waist circumference, BMI, metabolic syndrome, diabetes, hypertension, hypercholesterolemia



Side Effect

- A side effect called QT Prolongation or QTc Prolongation affects the length of time it takes for the heart to go through its electronic and mechanical cycle.
- Most antipsychotics cause this
Mellaril is the most problematic

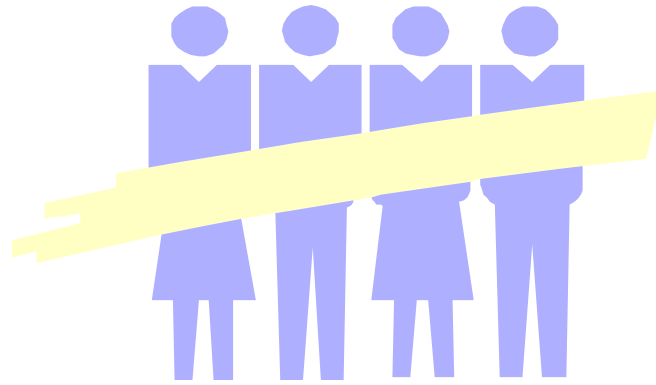


Interventions that Improve Recovery from Schizophrenia

- Intensive case management
- Atypical antipsychotic drugs
 - ▶ Especially clozapine in high hospital utilizers
- Rehabilitation therapy
- Family treatment
- Social skills training

Break





Mood Disorders



Depression



CALLED THE COMMON COLD OF MENTAL HEALTH ISSUES

Depression is more common in those with DD than for the general population



Bipolar Illness

Manic Depression



- An estimated: 5.7 million Americans have BPI.
- Bipolar illness has a 2- to 3-fold greater prevalence in the cognitively impaired than in the general population

Manic Symptoms

D Distractibility

I Insomnia

G Grandiosity

F Flight of ideas

A Agitation

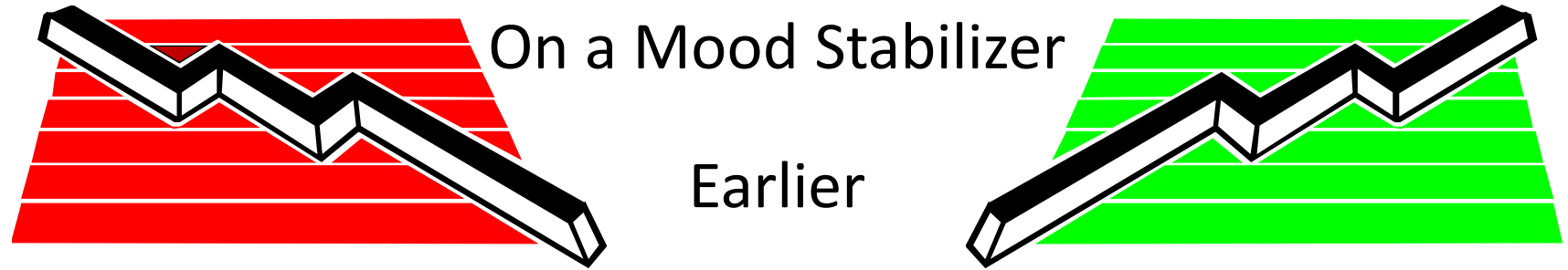
S Speech

T Thoughtlessness (Impulsivity)

Mood Stabilizers

- Lithium (LiCO₃)
- Anticonvulsants
- Atypical Antipsychotics

Starting Maintenance



Predicts Greater Improvement.

Stress & Relapse

- Individuals who are taught coping skills to anticipate potential problems are likely to do better at handling stressful situations.
- Education on self-monitoring can be an important tool for the individual adjusting to a new environment.

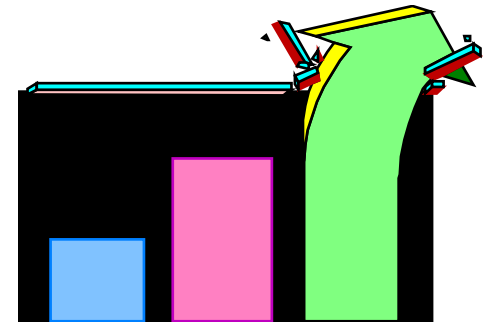


Anxiety and the Medications to Address It



Anxiety

- At low to moderate levels, anxiety can be motivating, instructive, and provide cues to the environment.
- When anxiety passes these stages and proceeds to excess, high anxiety and panic can occur.
- Extreme feelings of anxiety are not motivating—in fact they are immobilizing and learning is not possible.



Anxiolytics (Anti-Anxiety Meds)

Anti-Anxiety medications include tranquilizers

- Benzodiazepines such as Valium, Librium, Ativan, Xanax, and Versed
- Non-benzodiazepines such as Ambien and Sonata

Anxiolytics (Anti-Anxiety Meds)

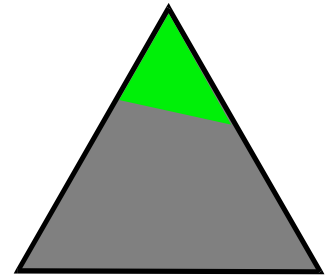
- Medicating such that higher levels of anxiety are prevented allows the individual to have enough anxiety in a given situation to manage that anxiety with the coping skills taught, and to gauge their effectiveness.
- If antianxiety medications are given without regard to the actual anxiety level and the learning of the individual, it is possible to obliterate the need to learn to cope with stress. The client learns instead to rely on the medication to cope.

Strategies to Overcome Communication Barriers and Resistance To Treatment



Routines

You can help make waking up earlier in the morning easier. For many people with any DD, it is important that they also have morning routines. This may reduce some of the challenging mornings. For example, if client Joshua has been in the habit of eating breakfast in his pajamas and watching his favorite television show for an hour prior to getting dressed in one setting, it would be advisable to modify his routine several weeks prior to the change in setting.



Quieting the Storm

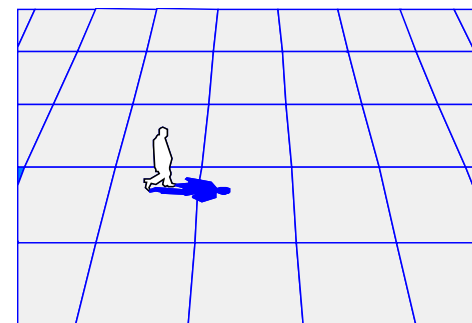
- Establish some quiet time routines by getting into the habit of doing quiet activities at a specific time and place every day. This could be time for reviewing previously mastered skills, doing silent reading, journal writing, crossword puzzles, and similar activities.

Communicate & Motivate

- Plan on using external motivational systems in order to be able to implement these changes. People with DD rarely see our agenda as necessary or important. This can often involve the use of activities/items we often give away freely (watching TV shows, playing favorite games, errand to favorite store, points/tokens exchangeable for something s/he wants). Remember, the key to motivation is that the reinforcer must be powerful and immediate!

Address Issue of Clothes

- Give the person with DD time to get used to wearing new clothes. In some cases, it may be helpful to wash them several times with fabric softener to lessen the sensory challenges. Plan wearing his/her new clothes for gradually longer periods of time, over the course of several days.



Set the Stage for a Good Relationship

Consider how a flexible attitude on your part can make all tasks and issues run a lot more smoothly.



Orchestrate a Few Social Gatherings

- The development of positive social relationships is essential but requires planning. Prior to the start of any new social situation, target one or two people who will be involved in a social activity with the DD person. Usually, successful social experiences are easiest to structure with one person at a time, rather than a group.

Plan a Relaxing Adult Day

- People with DDs need an advocate - which is a never-ending job! There is always so much to teach and so much to do. Usually, there are stressors - not only for people with DDs, but their caretakers as well. Remember to make some effort to take care of your own needs in order to have the time and energy to attend to the needs of others.

What We've Covered . . .

- Common presentations
- Assessment strategies
- Typical medications
- Communication tools
- Coping with resistance to assessment and treatment

Poll Questions

Question 1: One of your recipients, who has always been self stimulating, begins to significantly scratch and cut herself as well. This could mean which of the following?

- (a) The recipient is having emotional problems
- (b) The recipient may have a new physical complaint
- (c) The recipient's blood pressure has changed
- (d) The recipient's medications need to have Gradual Dose Reduction (GDR)

Answers: 1. (a) + (b)

2. (c)

3. (d)

4. (b)

Correct Answer: 1. (a) + (b)

Poll Questions

Question 2: Assessment of a newly admitted recipient with developmental disabilities takes into consideration:

- ▶ (a) The recipient's communication skills
- ▶ (b) The recipient's functional level
- ▶ (c) The recipient's living environment
- ▶ (d) The recipient's physical status

Answers: 1. (b) + (c)

2. (c)

3. (a)

4. All of the above

Correct Answer: 4. All of the above

Poll Questions

Question 3: You are conducting a group with five recipients who have developmental disabilities and one recipient suddenly and for the first time is screaming, acting out, and aggressive. The most likely explanation could be:

- (a) Dementia
- (b) Infection
- (c) Environment
- (d) Allergy

- Answers:**
1. (b) + (c)
 - 2 (c)
 3. (a)
 4. All of the above

Correct Answer: 2. (c)

Poll Questions

Question 4: When giving directions to recipients with developmental disabilities and they are resisting assistance:

- ▶ (a) Repeat what they should be doing until they comply.
- ▶ (b) Distract with something they like to do then slowly reintroduce assistance.
- ▶ (c) Express approval verbally and with appropriate facial expressions.
- ▶ (d) Carefully explain three problems with what they are doing.

Answers: 1. (a)

2. (b)

3. (c)

4. (d)

Correct Answer: 2. (b)

Poll Questions

Question 5: Regarding medications commonly used with people with developmental disabilities:

- ▶ (a) There are a variety of medications specifically indicated for treatment of developmental disabilities.
- ▶ (b) Medications treat the various symptoms but are not indicated for the disability.
- ▶ (c) Indications are not relevant when discussing medications.
- ▶ (d) No medications are commonly used exclusively for those with developmental disabilities.

Answers: 1. (a)

2. (b)

3. (c) + (d)

4. (d)

Correct Answer: 2

Evaluation Survey

At the conclusion of the webinar, please fill out the survey that will pop up in your internet browser.

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Questions / Comments?

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