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Neuropsychiatric Disorders

- Neurocognitive Disorders
  - Memory, language, attention, etc.

- Disorders of mood and affect
  - Moody, irritable, flat or labile affect, apathy

- Disorders of behavior
  - Impulsive, impatient, hyperactive, perseverative, motor planning impairments

- Impulse control disorders
  - Impulsive aggression, dis-inhibited sexuality
Neurocognitive Disorders?

- An **acquired** decline in cognition.
  - Not a developmental disorder.
- Due to neurologic or psychiatric disorder.
  - Delirium – (acute or subacute disturbance of alertness, awareness, and attention with a fluctuating course).
  - Learning disabilities, schizophrenia, depression, bipolar.
- **Major cognitive disorder (Dementia)** - two domains.
  - Memory (verbal-visual), reasoning, language, attention-working memory, executive cognition, processing speed.
- **Minor cognitive impairment (MCI)** – one domain.
  - Amnesia, aphasia, agnosia, apraxia.
- Associated behavior problems:
  - Agitation, aggression, apathy, irritability, anxiety, wandering.
Cognitive Disorders in Youth

- **Typical Neurocognitive Deficits**
  - Attention (working memory)
  - Memory (verbal or visual learning)
  - Reasoning (verbal or visual processing)
  - Processing speed (quality not impaired)
  - Cognitive flexibility (executive cognition)
    - Rigid thinking, disorganized, can’t change ideas
  - Language (fluency and/or comprehension)
    - Anomia, agraphia, alexia, acalculia, etc.
Syndromes

- ADHD (inattentive, impulsive, hyperactive)
  - Neurocognitive disorders (learning disorders)
- Bipolar Disorder (manic-depressive)
  - Neurocognitive disorder (processing speed)
- Schizophrenia (thought disorder)
  - Neurocognitive disorder (executive cognition)
- Neuropsychiatric (hot-temper aggression)
  - Neurocognitive disorder (memory impairment)
  - Frequently associated with ADHD
Frustration and Aggression

- Major trigger for aggression:
  - Frustration; often associated with a mild neurocognitive impairment.

- Brain disorders: neurocognitive impairments are common.
  - Misinterprets what is said, may be concrete in thinking, rigid (hard headed), inpatient, impulsive, inattentive, forgetful, slower in processing (speed, not quality of thought).
Disorders of Mood and Affect

- Flat affect
  - May or may not be depressed
  - Normal affective tone is missing
- Labile affect
  - Too much affect; cries, laughs, screams
- Irritabile moods: short temper, negative
- Moody: sad moods for no reason
- Apathy: nothing matters, no drive, no motivation, lack of enthusiasm for activities
Neuropsychiatry and Moods

- Neuropsychiatric conditions:
  - Moody: May mimic Bipolar Disorder
  - Apathetic: May mimic Depression
  - Flat affect: May mimic psychopathy
  - Labile affect: May mimic personality d/o
  - Irritable moods: May mimic Conduct d/o

- Mood and Affect Disorders
  - Caused by brain damage or electrical d/o
Neuropsychiatry and Behavior

- Pseudo-psychopathic
  - Frontal lobe damage
    - Impairment of impulse control
    - No concern for consequences of behavior

- Pseudo-bipolar
  - Temporal limbic damage
    - Impairment of emotion control
    - No control of temper or rages
Impulse Control Disorders

Acquired, due to brain damage or cerebral dysrhythmia; loss of control systems

- ADHD due to frontal lobe brain damage
  - Usually during pregnancy or delivery
  - Fetal alcohol effect
- Mood Disorder, NOS
  - Poor control of emotions, impulsive aggression
- General dis-inhibition: aggression, sexuality
  - Frontal lobe: acts impulsively, no brakes
Too much or too little control?

- **Frontal lobe**
  - Too little control: hyperactive, impulsive
  - Too much control: compulsive symptoms

- **Temporal lobe**
  - Too little control: explosive, labile
  - Too much control: flat, apathetic

- **Gray matter**: neurocognitive disorders
- **White matter**: psychomotor planning d/o
Interventions

- Medications for mood disorders
- Medications for frontal lobe disorders
- Therapeutic interventions
- School interventions
- Nursing interventions
  - Neuropsychiatric milieu
  - Positive Discipline
  - Neurocognitive interventions
Medications for Mood Disorders

- Tegretol (carbamazepine)
- Trileptal (oxcarbazepine)
- Keppra (levetiracetam)
- Depakote (divalproex sodium)
- Topamax (topiramate)
- Lamictal (lamotrigine)
Medications for Frontal Lobe

- **Stimulants**
  - Used for ADHD symptoms
- **Amantadine**
  - Used in brain damage
- **Alpha adrenergic agonists**
  - Clonidine
  - Tenex (guanfacine)
Therapeutic Interventions

- More supportive psychotherapy
- Less psychodynamic psychotherapy
- More family therapy
- More behavioral therapy
- More skill-based therapy
- More active, talk and walk, talk and play basketball, therapeutic games, etc.
Educational Interventions

- Neuropsychological testing
  - Show strengths and weakness in cognition
- Develop IEP for neurocognitive d/o’s
  - Memory – use visual aids, repetition, more multiple choice tests
  - Executive- help with planning, organization
- Use positive Behavior Intervention Plans
- Lighten up, pick your battles, on moody or irritable days.
School Interventions

- Give more time on exams
- Use more multiple choice tests
- Grade on quality not quantity or speed
- Preferential seating near teacher
- Give breaks, less lecture, more action
- Strong visual aids, use of calculator
- Strong on praise, less punitive
Nursing Interventions

- Attention: get eye contact
- Mem.: write down/one-step commands
- Language: Repeat directives, simplify communications, use picture chart
- Alexia, agraphia; no written assignments
- Slow processing speed: give more time
- Poor executive: help with organization
Nursing Interventions

- Neuropsychiatric Milieu
  - Low stimulation, more structure/routines, more positive discipline, no confrontation
- Make level system very simple and easy
  - So easy, a four year old could understand
- Do not overuse punishments
  - Mild punishments OK, but add redirection
- Use more Behavior Contracts
Summary

- In Neuropsychiatry
- Expect:
  - Neurocognitive disorders
  - Disorders of mood and affect
  - Disorders of behavior
  - Disorders of impulse control
- Interventions: medicine, school, and nursing - accommodate above disorders