

Mental Health Unit II Part III

Children & Adolescents

❖ Introduction

- It is often difficult to determine whether a child's behavior indicates emotional problems.
- An emotional problem exists if behavioral manifestations:
 - Are not age appropriate
 - Deviate from cultural norms
 - Interfere with adaptive functioning

❖ Prevalence and Comorbidity

- 1/2 of all psychiatric illnesses begin before 14 years of age
- 20% of children have a mental illness that cause significant impairment
- Only about 1/5 of all young people who need mental health care are receiving the help they need.
- Children with mental illness often meet the criteria for more than one diagnostic category.

❖ Brain changes in adolescence

- The brain does not fully mature until mid 20's
 - Prefrontal cortex
 - Limbic System
- Synaptic pruning occurs in adolescence
 - Implications in adulthood

❖ Risk Factors

- Biological Factors
 - Genetics & Neurobiological
- Psychological Factors
 - Temperament
 - Seen early in infancy
 - Attitude, mood, and behavior
- Resilience
 - Adapt to change
 - Form relationships
 - Problem solve
 - Distance themselves from emotional chaos
- Environmental
 - Childhood Trauma
 - Associated with adult dysfunction
- Adverse Childhood Experiences (ACEs)
 - Emotional, Physical, Sexual
- Nurses are required to report all cases of child abuse

❖ Mental Health Assessment

- Holistic and includes:
 - Presenting problem
 - Developmental history
 - Developmental assessment
 - Medical History
 - Family history
 - Mental status assessment
 - Adapt to the child's developmental stage

❖ Mental Status Examination

- Characteristics of a mentally healthy child/ adolescent
 - Trusts Others
 - Correctly interprets reality
 - Positive self concept
 - Copes well with anxiety & stress

- Develops relationships
- ❖ Interventions
 - Parent involvement is KEY!
 - Group therapy- young children (play) & older children (talk)
 - Milieu therapy- safe & structured
 - Behavior modification/ CBT- Behavior charts
 - Restraints & Seclusion?- Can be harmful, utilize quiet rooms if needed
 - Play therapy- young children, help with coping skills
 - Therapeutic drawing- Allows for expression
 - Music therapy- Relaxing environment
- ❖ Disruptive Behavior Management
 - Least restrictive environment
 - Verbal interventions
 - Medication
 - Time-out
 - Self reflection & ability to re-gain control
 - Seclusion & Restraint
 - Psychologically harmful
 - May be physically dangerous
- ❖ Autism Spectrum Disorder
 - Present with
 - Deficits in social and communication interactions
 - Repetitive patterns of behavior, interests, or activities
 - Severity based on functional ability
 - Level 1: noticeable social deficit, but language and speech are normal
 - Level 2: noticeable deficit in verbal and nonverbal social and communication skills
 - Level 3: social deficits are severe, with communication being limited and needs-based
- ❖ Assessment
 - Impairment in social interaction
 - Difficulty forming interpersonal relationships
 - Show little interest in people
 - Delayed speech or mutism
 - Impairment in communication and imaginative activity
 - Ritualized behaviors and interests may be noted
 - Repetitive patterns
 - Sensory disturbances
 - Hypersensitivity to stimuli
 - Motor signs
 - Walking on toes
- ❖ Nursing Interventions
 - Multidisciplinary
 - ST, OT, PT, School support
 - Nursing interventions for the child with ASD are aimed at
 - Protection of the child from self-harm
 - Improvement in social functioning
 - Improvement in verbal communication
 - Calming environment
 - Eye-level
 - Sensory items
- ❖ Outcomes & Evaluation
 - Exhibits no evidence of self-harm

- Interacts appropriately with at least one staff member
- Demonstrates trust in at least one staff member
- Is able to communicate so that he or she can be understood by at least one staff member
- ❖ Evaluation:
 - Have the nursing actions have been effective in achieving the established goals?
 - Involve the family
- ❖ Pharmacological Intervention for ASD
 - Atypical Antipsychotics- Risperidone, Aripiprazole
 - Targets: Aggression, self-injury, temper tantrums, labile mood
 - Side Effects: weight gain, DM, anticholinergic, mild EPS
 - Oral or IM
 - Start low and go slow
 - SSRIs- Fluoxetine, Sertraline
 - Targets: anger, agitation, compulsive behaviors
 - Side effects, serotonin syndrome, weight gain, suicidal ideation
- ❖ Intellectual Disability
 - Can be mild, moderate, severe, or profound.
 - Causes may be the result of:
 - Heredity (Tay-Sachs disease, fragile X syndrome)
 - Alterations in early embryonic development (Down syndrome, fetal alcohol syndrome)
 - Pregnancy or perinatal problems (fetal malnutrition, prematurity, hypoxia, infections)
 - Other factors such as trauma or poisoning
 - Environmental or social neglect
- ❖ ID: 4 levels
 - Mild (85%)
 - Independent living, academic skills- mid elementary
 - Moderate (10%)
 - Reading level- 1st-3rd grade, Communication, social, and academic skills are developed slowly
 - Severe (3-4%)
 - Minimal verbal skills, assistance with ADLs, performs simple tasks with help
 - Profound (1-2%)
 - Nonverbal, requires constant supervision, significantly reduced life expectancy
- ❖ Assessment
 - Assess:
 - Strengths
 - Limitations
 - Screening
 - Include family members in the planning and implementation of care.
 - Level of independence
 - Development of plan
 - Appropriate schooling
 - Individualized Education Plan (IEP)
 - Federal Individuals with Disabilities Education Act (IDEA).
- ❖ Outcomes & Evaluation
 - The client
 - No physical harm
 - Self-care needs fulfilled
 - Interacts with others in a socially appropriate manner
 - Is able to accept direction without becoming defensive
 - Adaptive coping skills
- ❖ Evaluation of care given to the client with ID should reflect positive behavioral changes.

- ❖ Attention Deficit/Hyperactivity Disorder (ADHD)
 - Essential features include developmentally inappropriate degrees of:
 - Inattention
 - Problems with concentration and focus, Easily distracted, Appearing not to listen, Forgetfulness
 - Impulsiveness
 - Blurts out answers, Has difficulty waiting for own turn or being patient, intrudes in others' conversations and games
 - Hyperactivity
 - Fidgets, Runs and climbs, Constantly "on the go", Talks excessively
- ❖ Etiology
 - Genetics
 - 30-40% of children with ADHD have a family member with the disorder.
 - Biochemical Theory
 - Prenatal risk factors
 - Maternal smoking/ ETOH use during pregnancy
 - Prematurity
 - Psychosocial influences
 - Disorganized or chaotic family environments
 - Maternal mental disorder or paternal criminality
 - Low socioeconomic status
- ❖ Outcomes
 - The client
 - Has experienced no physical harm
 - Interacts with others appropriately
 - Verbalizes positive aspects about self
 - Demonstrates fewer demanding behaviors
 - Cooperates with staff in an effort to complete assigned tasks
- ❖ Nursing Interventions
 - Behavior modification therapy
 - Parent training
 - School accommodations
 - Pharmacologic agents that address inattention and hyperactive and impulsive behaviors
 - Nursing interventions for the child with ADHD are aimed at
 - Ensuring that client remains free of injury
 - Encouraging appropriate interactions with others
 - Increasing feelings of self-worth
 - Fostering motivation for compliance with tasks
- ❖ Psychopharmacological Intervention for ADHD
 - Central nervous system (CNS) stimulants
 - Dextroamphetamine (Adderall)
 - Methamphetamine (Desoxyn)
 - Methylphenidate (Ritalin)
 - Administer after meals. Do not give after 4pm
 - Side effects: Insomnia, anorexia, weight loss, tachycardia
 - Toxicity: Dizziness, HTN, hallucinations, seizures
 - Alpha Agonists
 - Clonidine
 - Guanfacine
 - Side effects: sedation, hypotension, bradycardia, weight gain
- ❖ Diagnosis of bipolar disorder in children
 - Controversial

- Mood lability- Irritability is the hallmark sign!
- Mean age 18-20
- Rapid cycling is very prominent in children/ adolescents
- Depressive symptoms <10 yrs. old = ↑ likelihood
- 94% of children with bipolar disorder will also have ADHD
- Child Mania Rating Scale (CMRS)
- 25-50% of those with PBD will attempt suicide
- Mania
 - *Decreased need for sleep*
 - *Rapid speech*
 - *Irritability*
 - *Hypersexual behavior*
- Diagnosis
 - *Providers are less confident in diagnosing PBD – leading to an in ↑ ADHD diagnoses*
- Treatment
 - *Mood Stabilizers – Lithium, Divalproex, Carbamazepine*
 - *Antipsychotics – First Generation (EPS), Second Generation (Metabolic Syndrome)*
- ❖ Disruptive Mood Dysregulation Disorder (DMDD)
 - Symptoms: angry or irritable mood, temper tantrums or outbursts atypical of age; severe symptoms impact function
 - Be aware of presentation of depression in children
 - Conduct suicide risk assessments
- ❖ Oppositional Defiant Disorder (ODD)
 - Persistent pattern of angry mood and defiant behavior
 - Occurs more frequently than in their peers
 - Interferes with social, educational, or vocational activities
- ❖ Assessment
 - Stubbornness, procrastination
 - Disobedience, negativism
 - Carelessness, testing of limits
 - Resistance to directions
 - Unwillingness to cooperate
 - Characterized by passive-aggressive behaviors
 - School avoidance and underachievement
 - Temper tantrums, argumentative
 - Impaired interpersonal relationships
- ❖ Conduct Disorder
 - Persistent pattern of behavior in which the basic rights of others and major age-appropriate societal norms or rules are violated.
 - Childhood-onset conduct disorder
 - Seen as early as 2 yrs.
 - More severe than ODD.
 - physically aggressive, has poor peer relationships, shows little concern for others, and lacks guilt and remorse
 - Adolescent-onset conduct disorder
 - Results in less aggression.
 - Acts out misconduct with peer group
 - early-onset sexual behaviors
 - drinking, substance abuse
 - risk-taking behaviors
- ❖ Assessment
 - Inability to control anger

- Low academic achievement
- Run away from home
- Breaking the law
 - setting fires
 - destroying property
 - breaking into property
- Bullies, threatens, physical fights, uses weapons to cause harm
- ❖ ODD and Conduct Disorder
 - Assessment, diagnosis, and implementation
 - Parenting classes and parent management training
 - Set limits on inappropriate behaviors
 - Treatment is long term, usually several hours per week.
 - Therapy includes problem-solving and social skills, controlling impulses, developing empathy, and medication to treat coexisting conditions such as ADHD, anxiety, or mood disorders.
- ❖ ODD and Conduct Disorder: Medications
- ❖ Selective Serotonin Reuptake Inhibitors (SSRIs)
- ❖ Fluoxetine, Sertraline
 - Decreases anger & agitation
- ❖ Central nervous system (CNS) stimulants
- ❖ *Dextroamphetamine, Methamphetamine, Methylphenidate*
- ❖ Atypical Antipsychotics
- ❖ *Risperidone, Olanzapine, quetiapine, aripiprazole*
 - Decreases aggressiveness
- ❖ **Neurocognitive Disorders**
 - 3 Classifications
 - Delirium
 - Mild Neurocognitive Disorders
 - Major Neurocognitive Disorders
- ❖ Introduction
 - Clinically significant deficit in cognition or memory
 - Significant change from a previous level of functioning.
 - The number of people with these disorders is growing
 - The objective of care:
 - provide these individuals with the dignity and quality of life
 - offering guidance and support
- ❖ Delirium
 - Acute cognitive disturbance
 - Characterized by a disturbance in level of awareness and a change in cognition
 - Often reversible
 - Develops rapidly over a short period
 - Patients >65 years old- 50%
- ❖ Delirium
 - Usually due to an underlying physiological cause
 - Risk Factors
 - Cognitive impairment
 - Older age
 - Infection
 - Polypharmacy
 - Surgery
 - Restraint use
- ❖ Clinical Picture

- Characterized by:
 - Inability to focus or sustain attention, distractible
 - Abrupt onset
 - Disorientation, Anxiety, Agitation
 - Poor memory, Delusional thinking, Visual hallucinations
- Can have permanent cognitive decline
- Associated with longer hospitalizations and ↑ morbidity & mortality
- ❖ Assessment
 - Assess patient safety; risk for injury.
 - Determine fluctuating levels of consciousness.
 - Interview the family to determine the patient's normal level of consciousness and cognition.
 - Perform a comprehensive nursing assessment
 - Assess vital and neurologic signs
 - Review medications
 - Physical needs
- ❖ Outcomes
 - GOAL: Patient will return to previous level of functioning.
 - Patient will:
 - remain safe and free from injury while in the hospital
 - oriented to time, place, and person
 - free from falls and injury
 - IV/ Foley will remain in place.
- ❖ Planning and Implementing
 - Medical management:
 - treating any underlying cause.
 - Nursing implementations:
 - directed toward patient safety.
 - Communicate in simple and concrete phrases.
 - Use reality-orientation aids
 - Supportive family
 - Sitters
- ❖ Mild & Major Neurocognitive Disorders
 - Dementia is a broad term → Progressive deterioration in cognitive functioning
 - Mild → symptoms do not interfere with ADLs
 - Major → symptoms progress & interfere with ADLs and independence
 - Collection of symptoms
 - Significant cognitive decline
 - Cognitive deficits interfere with independence
 - Deficits can not be explained by another mental health disorder.
- ❖ Alzheimer Disease Data
 - 50% to 80% of all dementias
 - 5.3 million Americans
 - 6th leading cause of death in U.S. adults
 - Stages
 - 1 (Mild- Forgetfulness) – 4 (Late- End Stage)
- ❖ Risk Factors
 - Age & Gender
 - Incidence doubles after age 65
 - AD is not a normal part of aging
 - 2/3rds are women
 - Family History
 - First-degree relatives

- Lifestyle
 - Lack of exercise
 - Poor diet
- ❖ Neurobiological Factors
 - Beta-amyloid plaques & Neurofibrillary tangles
 - Overabundance of beta-amyloid
 - Tau protein changes
 - Anatomical Changes
 - Cortical atrophy
 - Hippocampus
 - Ventricles
- ❖ Stage1 (Mild) Forgetfulness
 - Loss of energy, drive, initiative
 - Difficulty learning
 - Short term memory loss, Forgetfulness
 - Depression is common
 - Apathy
 - Confusion
- ❖ Stage 2 (Moderate) Confusion
 - Gaps in memory
 - Hygiene suffers
 - Apraxia
 - Labile Mood: paranoia, anger, loss of interest
 - May need full time care
 - Withdraw
- ❖ Stage 3 (moderate – severe) Ambulatory dementia
 - Unable to identify familiar objects or people (agnosia)
 - Words must be repeated to complete a task (apraxia)
 - Agraphia is evident
 - Total care is needed
 - Agitation, violence, paranoia, delusions
 - Wondering
 - Safety
- ❖ Stage 4 (late) End Stage
 - Hyperorality
 - Blunting of emotions
 - Visual Agnosia
 - Hypermetamorphosis
 - Loss of ability to talk & walk
 - Dysphasia
 - Weight loss
 - At risk for: dehydration, pressure ulcers, falls
 - Death secondary to choking/ infection
- ❖ Cardinal Symptoms
 - First cognitive symptom → impairment in memory & learning
 - Defense Mechanisms
 - Denial
 - Confabulation → unconscious attempt to maintain self esteem
 - Perseveration → repetition of phrases or behavior
 - Avoidance of questions
 - Cognitive Impairment
 - Amnesia

- Aphasia
- Apraxia
- Agnosia
- ❖ Interventions
 - Encourage independence with ADLs
 - Label clothing
 - Give step-by-step instructions
 - Monitor intake
 - Weekly weights
 - Bowel and bladder program
 - Maintain a calm environment
 - Use medications for sleep with caution
- ❖ Communication Guidelines
 - Always identify yourself.
 - Call the person by his or her name at each meeting.
 - Speak slowly.
 - Use short, simple words and phrases.
 - Maintain face-to-face contact.
 - Be near the patient when talking, one or two arm lengths' away.
 - Have the patient wear eyeglasses or a hearing aid.
 - Keep the patient's room well lit.
 - Have clocks, calendars, and personal items in clear view.
 - Provide a daily schedule
 - Reinforce the patient's pictures, nonverbal gestures, X's on calendars, and other methods to present reality.
- ❖ Interventions for the safe environment
 - Gradually restrict the use of a car.
 - Remove throw rugs
 - If verbally upset, give support and change the topic.
 - Install safety bars in the bathroom.
 - Wandering
 - Mattress on floor
 - Locks on the top of the door
- ❖ Supporting Families
 - Transportation services
 - Supervision and care when the primary caregiver is out of the home
 - Daycare centers
 - Support groups
 - Respite and residential services
 - Meals on wheels
 - Alzheimer's Association
- ❖ Pharmacologic Intervention
 - Age alters the metabolism, absorption, and elimination of many medications, and older adults are more sensitive to these effects. In older patients, remember to
 - **Cholinesterase Inhibitors:**
 - Donepezil (Aricept)
 - Rivastigmine (Exelon)
 - Galantamine (Razadyne)
 - **Side Effects:**
 - ◆ Nausea
 - ◆ Vomiting
 - ◆ Diarrhea

- ◆ Weight loss
 - ◆ Headache
 - Cholinergic crisis
 - ◆ Respiratory support
 - ◆ Atropine
- Memantine (Namenda)
 - *N*-methyl-D-aspartate (NMDA) antagonist
 - Normalizes and regulates glutamate
 - Side Effects: dizziness, headache, constipation, confusion
- Namzaric (Memantine + Donepezil)
 - Donepezil prevents breakdown of acetylcholine
 - Memantine regulates glutamate
- Pharmaceutical agents for agitation, aggression, hallucinations, thought disturbances, and wandering
 - Risperidone (Risperdal)
 - Olanzapine (Zyprexa)
 - Quetiapine (Seroquel)
 - Ziprasidone (Geodon)
- Pharmaceutical agents for depression
 - Selective serotonin reuptake inhibitors
 - Often considered first-line due to favorable side effect profile
 - Trazodone (Desyrel)
 - Good choice for clients with insomnia
- Pharmaceutical agents for anxiety (should not be used routinely for prolonged periods)
 - Chlordiazepoxide (Librium)
 - Alprazolam (Xanax)
 - Lorazepam (Ativan)
 - Diazepam (Valium)

❖ Substance-Related Disorders

- Substance addiction
 - Chronic, relapsing brain disease
 - Attempts to cut down or control use fail
 - Intense craving for the substance
 - Long-lasting changes in the brain
 - Use of the substance causes the person difficulty with interpersonal relationships or to become socially isolated
 - Engages in hazardous activities when impaired by the substance
 - Tolerance develops and the amount required to achieve the desired effect increases
 - Substance-specific symptoms occur upon discontinuation of use
- Substance intoxication
 - Development of a reversible syndrome of symptoms following excessive use of a substance
 - Direct effect on the central nervous system
 - Disruption in physical and psychological functioning
 - Judgment is disturbed and social and occupational functioning is impaired.
- Substance withdrawal
 - Development of symptoms that occurs upon abrupt reduction or discontinuation of a substance that has been used
 - Symptoms are specific to the substance that has been used.
 - Disruption in physical and psychological functioning

❖ Prevalence

- The U.S. has one of the highest levels of substance abuse and addiction in the world
- Drug overdose is the leading cause of accidental death in the U.S.

- Opioid use is most significant in the U.S.
- Alcohol use disorder is the most common substance use problem in the U.S.
- ❖ Adolescents who start drugs before the age of 14 have a high risk of developing an addiction
- ❖ Effects of route of substance ingestion
 - IV: Higher rate of infection, venous sclerosis, and positive HIV/AIDS; need for increasing doses for efficacy
 - Intranasal: Sinusitis, perforated nasal septum
 - Smoking: Respiratory infections; need for increasing doses for efficacy
- ❖ Predisposing Factors
 - Biological factors
 - Genetics: Apparent hereditary factor, particularly with alcoholism
 - Biochemical: Alcohol may produce morphine-like substances in the brain that are responsible for alcohol addiction.
 - Biochemical factors
 - Dopamine
 - Regulates motivation, emotion, cognition, and the ability to experience pleasure
 - Plays a major role in all addictions
 - Becomes less effective, so the individual needs more drug to raise dopamine levels
 - ◆ Cycle of tolerance
 - Psychological factors
 - Personality factors: Certain personality traits are thought to increase a tendency toward addictive behavior.
 - Cognitive factors: Irrational thinking patterns have long been identified as a problem that is central in addictions.
 - Sociocultural factors
 - Social learning: Children and adolescents are more likely to use substances with parents who provide model for substance use.
 - Use of substances may also be promoted within peer group.
 - Adverse childhood experiences (ACEs)
 - Inadequate parental supervision
- ❖ Alcohol Use Disorder
 - A legal substance
 - Abbreviation ETOH
 - Primarily metabolized in the liver
 - Alcohol content varies by type of beverage
- ❖ DSM-5 Diagnostic Criteria for Alcohol Use Disorder
 - Use in larger amounts or over long period
 - Persistent or unsuccessful efforts at control
 - Excessive time spent in procurement, use, or recovery
 - Craving
 - Recurrent use results in failure to fulfill major roles
 - Continued use despite persistent social problems
 - Loss of important activities due to use
 - Recurrent use despite physical hazards
 - Continued use despite knowledge of negative health effects
 - Tolerance (need for more; or diminished effect)
 - Withdrawal or continued use to avoid withdrawal
- ❖ What is heavy drinking?
 - For men:
 - More than 4 standard drinks on any 1 day, or more than 14 standard drinks in any 1 week
 - For women:
 - More than 3 standard drinks on any 1 day, or more than 7 standard drinks in any 1 week

❖ Alcohol Intoxication

- **Intoxication:** Blood alcohol level (BAL): determines level of intoxication and tolerance. 0.08 mg % - Legal level of intoxication in most states
- Slurred speech
- Incoordination
- Unsteady gait
- Drowsiness
- Decreased B/P
- Disinhibition of sexual or aggressive drives
- Impaired judgment
- Impaired social or occupational function
- Impaired attention
- Irritability

❖ Alcohol Withdrawal

- Tremors
- Cramps
- Vomiting
- Elevated heart rate, B/P, temperature
- Anxiety
- Insomnia
- Headache
- GI disturbances

❖ Alcohol Withdrawal Delirium

{Delirium Tremens (DTs)}

- Medical emergency
- Begins 48-96 hours after the last drink
- Lasts 1-5 days
- Hallucinations, delusions, agitation, fever, tachycardia, HTN, agitation, fluctuating levels of consciousness
- Hyperventilation → respiratory alkalosis → ↓cerebral blood flow
- Hypokalemia, hypomagnesemia, hypophosphatemia
- Can result in death → dysrhythmias

❖ Initial Intervention

- Seizure precautions
- Assessment of Vital Signs
- Medications
 - Benzodiazepines
 - Phenobarbital
 - Replace electrolytes
 - Multivitamin therapy
 - Thiamine
- CIWA scale

❖ Chronic Use

- Wernicke-Korsakoff syndrome → Thiamine!
- Alcoholic cardiomyopathy
- Esophagitis
- Gastritis
- Pancreatitis
- Alcoholic hepatitis → Cirrhosis

- Thrombocytopenia
- ❖ Pharmacologic Interventions: Long term Treatment
 - **Naltrexone** (*ReVia, Vivitrol*)
 - Reduces or eliminates alcohol craving.
 - **Acamprosate** (*Campral*)
 - Helps patient abstain from alcohol.
 - **Disulfiram** (*Antabuse*)
 - Reaction causes unpleasant physical effects.
- ❖ Types of Treatment
 - Conventional
 - Psychotherapy
 - Group therapy
 - Cognitive-behavioral therapy (CBT)
 - Motivational interviewing
 - Recovery Model
 - **12-Step Programs:**
AA, Al-Anon, Ala-Teen
 - **SMART**—self-management and recovery training
 - **Programs:**
 - Residential intensive outpatient
 - Outpatient drug-free
 - Employee assistance
 - Barriers to Treatment
- ❖ Opium
 - Opium → Morphine → Heroin
 - Morphine is 10X more powerful than Opium
 - Heroin is 2-5X more potent than morphine
 - Opioids of natural origin: Opium, Morphine
 - Opioid derivatives: Heroin, Hydromorphone, Oxycodone, Hydrocodone
 - Synthetic opiate-like drugs: Methadone, Fentanyl
- ❖ Opioid Use Disorder
 - Patterns or use/ abuse
 - Effects on the body
 - CNS effects: euphoria, mood changes, mental clouding, drowsiness, pain reduction
 - Gastrointestinal effects: n/v, decrease GI motility
 - Cardiovascular effects: ↓ pain (MI), ↓BP
 - Intoxication
 - Symptoms last for several hours
 - euphoria
 - apathy
 - dysphoria
 - psychomotor agitation or retardation
 - impaired judgment
 - Constricted pupils, ↓ respirations, ↓ BP, Slurred speech
 - Severe opioid intoxication
 - respiratory depression, coma, and death.
 - Withdrawal
 - From ultra-short-acting meperidine
 - Symptoms begin quickly, peak in 8 to 12 hours, and subside in 4 to 5 days.
 - From short-acting drugs (heroin)

- Symptoms occur within 6 to 8 hours, peak within 1 to 3 days, and gradually subside in 5 to 10 days.
 - From long-acting drugs (methadone)
 - Symptoms occur within 1 to 3 days, peak between days 4 and 6, and subside in 14 to 21 days.
- Symptoms of opioid withdrawal
 - nausea/vomiting
 - lacrimation or rhinorrhea
 - pupillary dilation
 - Piloerection/ chills
 - sweating
 - abdominal cramping
 - diarrhea
 - yawning
 - fever
 - Insomnia
 - Panic
- ❖ Emergency Care for Opioid Overdose
 - Support respirations/ maintain airway
 - Infuse IV fluids
 - Administer naloxone
 - Maintain patient safety, and institute seizure precautions
 - Monitor VS, cardiac output, neurological status
 - Death → Respiratory Depression
- ❖ Long-Term Pharmacologic Management
 - **Methadone** (Dolophine)
 - Most effective; opioid agonist that blocks the craving.
 - **Buprenorphine, Suboxone**
 - Blocks the signs and symptoms of opioid withdrawal.
 - **Naltrexone** (ReVia, Vivitrol)
 - Antagonist that blocks the euphoric effects of opioids.
- ❖ Stimulant Use Disorder
 - A profile of the substance
 - Amphetamines: Ecstasy, methamphetamine
 - Synthetic stimulants: Bath salts
 - Methylphenidate (Ritalin)
 - Cocaine (crack)
 - Caffeine
 - Nicotine
 - Highly Addictive
 - Dopamine, Serotonin, Norepinephrine
 - Intoxication
 - Euphoria, decreased appetite
 - impaired judgment, confusion
 - Tachycardia, HTN
 - Hyperthermia
 - Withdrawal
 - Sleep disturbances, fatigue
 - Cravings
 - Dysphoria → Suicidal ideation
 - Long Term Abuse
 - Neurotoxicity & Psychosis
 - Cracked teeth, skin infections, lung/ kidney/ liver damage

- Symptoms of an Overdose (Amphetamines & Cocaine)
 - Cardiac arrhythmias
 - Seizures
 - Extreme psychosis
 - Cardiac arrest → Possible death
- Emergency Treatment
 - Activated Charcoal
 - Fluids
 - Physical or Chemical restraints
 - Benzodiazepines
 - Quiet Environment
- ❖ Cannabis Use Disorder
 - Most widely used drug in the world
 - Tetrahydrocannabinol (THC) is the active ingredient – mind altering effects
 - Smoked or Ingested
 - Can be detected up to 4 weeks after use
- ❖ Effects on the body
 - Cardiovascular:
 - tachycardia, hypotension
 - Respiratory:
 - laryngitis, bronchitis, cough
 - Reproductive:
 - ↓ sperm count, motility, and structure in men. Suppression of ovulation and alteration in hormone levels in women.
 - CNS:
 - euphoria, relaxed inhibitions, disorientation, depersonalization, and relaxation. Impairment in judgment, alteration in memory and learning ability. Amotivational syndrome.
- ❖ Intoxication
 - Impaired motor coordination, euphoria, anxiety, sensation of slowed time, and impaired judgment.
 - Physical symptoms include
 - increased appetite
 - dry mouth
 - tachycardia
 - Impairment of motor skills lasts for 8 to 12 hours.
- ❖ Withdrawal
 - Symptoms occur within a week following cessation of use.
 - Symptoms include:
 - Irritability, anger, or aggression
 - Nervousness, restlessness, or anxiety
 - Sleep difficulty
 - Decreased appetite or weight loss
 - Depressed mood
 - Physical symptoms
- ❖ Hallucinogen Use Disorder
 - Naturally occurring hallucinogens (plants & mushrooms):
 - Mescaline, Psilocybin, salvia
 - Synthetic compounds:
 - LSD, ketamine, PCP
 - Effects on the Body
 - Physiological
 - Nausea/vomiting
 - Chills

- Pupil dilation
- Increased blood pressure, pulse
- Insomnia
- Elevated blood sugar
- Decreased respirations
- Psychological
 - Heightened response to color, sounds
 - Paranoia, panic
 - Euphoria
 - Depersonalization/ Derealization
 - Hallucinations → stimulation of the SNS
- Treatment
 - Low stimuli... minimal light, sound, activity
 - Attempt to “talk down” patient
 - Stay with the patient
 - Speak slowly and clearly in low voice
 - Antipsychotics or benzodiazepines
- ❖ Inhalant Use Disorder
 - fuels, solvents, adhesives, aerosol propellants, and paint thinners
 - Pattern of use:
 - Highest usage in ages 12-17
 - Methods: huffing, bagging, inhaled directly from the container or sprayed in the mouth/ nose
 - Effects on the body
 - CNS effects:
 - ataxia, neuropathy, speech problems, tremors
 - Respiratory effects:
 - wheezing, dyspnea, emphysema, pneumonia
 - Gastrointestinal effects:
 - abdominal pain, n/v
 - Renal system effects:
 - acute and chronic renal failure
 - Intoxication
 - Develops during or shortly after exposure
 - Dizziness, ataxia, muscle weakness
 - Euphoria, excitation, disinhibition, slurred speech
 - Nystagmus, blurred or double vision
 - Psychomotor retardation, hypoactive reflexes
 - Stupor or coma
 - Treatment
 - Support respirations
 - May have psychotic response → hours - weeks
 - Haloperidol for agitation
- ❖ What’s new?
 - Xylazine “tranq”
 - Intoxication → bradycardia, respiratory depression, hypotension, coma
 - How does it work?
 - Vasoconstrictor decreasing skin perfusion leading to cell death
 - Treatment
 - Supportive care
 - Wound care
 - Surgical debridement
 - Antibiotics

- ❖ Application of the Nursing Process
 - Nurses must begin relationship development with a substance abuser by examining their own attitudes and personal experiences with substances.
 - Motivational Interviewing
- ❖ Nursing Process: Assessment
 - Various assessment tools are available for determining the extent of the problem a client has with substances.
 - Drug history and assessment
 - Clinical Institute Withdrawal Assessment of Alcohol Scale
 - Michigan Alcoholism Screening Test (MAST)
 - CAGE Questionnaire
 - Have you ever felt you should Cut down on your drinking?
 - Have people Annoyed you by criticizing your drinking?
 - Have you ever felt bad or Guilty about your drinking?
 - Have you ever had a drink first thing in the morning to steady your nerves (Eye-opener)?
- ❖ Interview Questions
 - In the last year, have you ever drunk or used drugs more than you meant to?
 - Have you felt you wanted or needed to cut down on your drinking or drug use in the last year?
- ❖ Interview Guidelines
 - Matter-of-fact
 - Nonjudgmental fashion
 - Specific details need to include:
 - Drug used
 - Drug route
 - Drug quantity
 - Time of last use
 - Usual pattern of use
 - SBIRT Training
- ❖ Discover the uniqueness of each patient
 - Learn patient's family history and personal interests
 - Encourage discussion of values and ideals
 - Assist the patient to identify problems in life
 - Assist the patient to identify interests that are not drug-related
- ❖ Substance Use and Health Care Workers
 - 10% to 20% of all nurses in the United States are estimated to be addicted to some type of illegal or controlled substance
 - Many nurses with a substance use disorder are under identified, underreported, untreated, and may continue to practice
 - If indicators of impaired practice are observed or suspected, there is an ethical obligation to report
- ❖ Dual Diagnosis
 - Clients with a coexisting substance disorder and mental disorder may be assigned to a special program that targets the dual diagnosis.
 - Program combines special therapies that target both problems.
- ❖ Interventions
 - Provide safe and supportive environment.
 - Administer substitution therapy.
 - Develop trust.
 - Identify maladaptive behaviors or situations.
 - Establish trust.
 - Set limits.
 - Positive reinforcement
 - Involve the family

❖ Harm Reduction

- A set of practices that can reduce the impact of specific drug-using behaviors
- Goal: To buffer the community from the full impact of addiction
- Examples:
 - Methadone maintenance program
 - Needle exchange program
 - Easy availability of naloxone

❖ Relapse Prevention Strategies

- Basics
 - Keep the program simple at first.
 - Review the instructions with health team members.
 - Write down important information and telephone numbers.
- Skills
 - Provide CBT to increase coping skills.
- Relapse Prevention Groups
 - Join the appropriate therapeutic groups.
- Enhancement of Personal Insight
 - Become involved in group, individual, and/or family therapy.