

## Mental Health Unit II Part II

### Depressive Disorders

- Introduction
  - Depression is the oldest and one of the most frequently diagnosed psychiatric illnesses.
  - Transient symptoms are normal, healthy responses to everyday disappointments in life.
  - Pathological depression occurs when adaptation is ineffective.
  - Mood is also called *affect*.
  - Depression is an alteration in mood that is expressed by feelings of sadness, despair, and pessimism.
- Epidemiology
  - Lifetime prevalence rate: 28.2%
  - Woman > Men
  - Comorbidity
- Children and Adolescents
  - Children as young as 3 years of age have been diagnosed with MDD
  - Youth (age 12 – 17): the incidence of having at least one MDE in the past year is 11.93%
  - After recovery from an acute depressive episode, 30 to 70% of children relapse.
  - In adolescents, 20 to 50% may relapse.
- Older Adults
  - Clinical depression occurs in 7% of the general older population with significant disability for those affected.
  - Estimates of incidence in the older adult are as follows:
    - Older people living in the community range from less than 1% to about 5%
    - 13.5% in those requiring a home health care
    - 11.5% in older hospital patients
    - 10 to 15% of older adults have clinically significant depressive symptoms even in the absence of a major depressive disorder.
- Primary Risk Factors
  - History of prior episodes of depression
  - Family history of depressive disorder, especially in first-degree relatives
  - History of suicide attempts or family history of suicide
  - Member of the LGBTQ community
  - Female gender
  - Age 40 years or younger
  - Postpartum period
  - Chronic medical illness
  - Absence of social support
  - Negative, stressful life events, particularly early trauma
  - Active alcohol or substance use disorder
  - History of sexual abuse
- Theory
  - Biochemical
    - Serotonin: regulator of sleep, appetite, libido
      - Serotonin-circuit dysfunction = poor impulse control, low sex drive, decreased appetite, disturbed regulations of body temperature, and irritability
    - Norepinephrine: ↓ levels may account for anergia, anhedonia decreased concentration, and diminished libido
    - Dopamine: reward and incentive behavior process, emotional expression, and learning processes
  - Bio/Psychosocial
    - Cognitive Theory
      - Predisposed to depression through early life experiences

- Beck's cognitive triad:
  - Negative, self-deprecating view of self
  - Pessimistic view of the world
  - Belief that negative reinforcement will continue
- CBT → what you think = what you do

## Mood Disorders

- Disruptive Mood Dysregulation Disorder
  - Introduced due to an increase in bipolar diagnosis in children
    - Most children do not display bipolar symptoms in adulthood
    - Major depressive disorder or anxiety disorders were more likely to develop in adulthood
  - Symptoms
    - Severe irritability & anger
    - Temper tantrums at least 3x/ week
      - Onset must be before the age of 10
      - Occurs in children aged 6-18
- Major Depressive Disorder
  - Characterized by depressed mood
  - Loss of interest or pleasure in usual activities
  - Symptoms present for at least 2 weeks
  - No history of manic behavior
  - Not related to substance use
- DSM-5
  - **Depressed Mood**
  - **Anhedonia**
  - Change in weight
  - Insomnia or hypersomnia
  - Psychomotor agitation or retardation
  - Fatigue or energy loss
  - Feelings of worthlessness or guilt
  - Diminished concentration or indecisiveness
  - Recurrent thoughts of death or suicidal thoughts
- Persistent Depressive Disorder
  - Depressed mood for at least 2 years, for more days than not
  - Disorder of chronicity rather than severity
  - Symptoms:
    - Daytime fatigue
    - Not always able to function at work and in social situations
    - Chronic low depression/ irritable mood
    - Eating too much or too little
    - Difficulty falling sleeping and excessive sleeping (hypersomnia)
    - Decreased capacity to experience pleasure
    - Negative pessimistic thinking
    - Low self-esteem
    - “Down in the dumps”

## Postpartum Mood Disorders

- Baby Blues
  - Up to 80% of women experience a mild form of depression or “baby blues”
  - Mood changes, anxiety, crying, difficulty concentrating, sadness
  - Symptoms present 2-3 days after the baby is born and last up to 2 weeks
  - Estrogen & progesterone ↓
  - Treatment: Supportive care
- Postpartum Depression

- 1 in 7 women (15%)
- Begins 1-3 weeks after giving birth
- ½ of these women, symptoms begin during pregnancy
- “Peripartum Episodes”
- Estrogen & progesterone ↓
- o Risk Factors
  - Depression during pregnancy
  - History of MDD or other MH condition
  - History of abuse/ DV
  - High stress levels
  - Unwanted pregnancy
  - < 19 yrs old
  - Diabetes/ gestational diabetes
  - Complications during pregnancy
- o Signs and Symptoms:
  - Intense pervasive sadness
  - Severe labile mood swings
  - Loss of appetite or binges with weight gain
  - Sleep deprivation
  - Irritability
  - Severe anxiety and panic attacks
  - Feelings of detachment from the newborn
  - Symptoms last longer than 2 weeks

| Baby blues  | Postpartum depression  |
|---|--|
| Feeling restless or anxious   | Feeling overpowering guilt, sadness or panic   |
| Being impatient or grumpy   | Being afraid of staying alone  |
| Crying for no reason  | Crying, anxiety or worrying a lot  |
| Feeling like “I’m not myself today”   | Feeling hopeless or like you’re not good enough  |
| Finding it hard to concentrate  | No energy and finding it hard to focus   |
| Mood changes  | Weight loss, weight gain or appetite changes   |
| Sadness   | Scary thoughts about yourself or your baby   |
| Starts within a few days of giving birth; goes away on its own within a couple of weeks | Usually starts within 1-3 weeks of giving birth or anytime up to one year; needs treatment to get better |

- Postpartum Psychosis
  - o Rare: Occurs in 1 in 1,000 deliveries
  - o Begins in the first 2 weeks after giving birth
  - o The most severe perinatal mood disorders
  - o At Risk: MDD, Bipolar Disorder, Schizophrenia
  - o Risk of reoccurrence: 30-50%
  - o Symptoms:
    - Hallucinations/ Delusions
    - Confusion
    - Paranoia
    - Rapid mood swings
    - Trouble sleeping
    - Thoughts of harming their baby/ self/ others
  - o Treatment:

- Inpatient psychiatric care- Visits with the newborn must be closely supervised
  - Antipsychotics, mood stabilizers, benzodiazepines
  - ECT
- Screening for Postpartum Depression
  - Screening: during pregnancy and postpartum
  - Two questions to ask...
    - Over the past 2 weeks have you ever felt down, depressed, or hopeless?
    - Over the past 2 weeks have you felt little interest or pleasure in doing things?
- Tips to cope with postpartum depression
  - Be realistic about expectations for yourself and your baby
  - Ask for help – let others know how they can help
  - Sleep or rest when your baby sleeps
  - Exercise; take a walk and get out of the house for a break
  - Eat a balanced diet
  - Keep in touch with family and friends – do not isolate
  - Foster your relationship with you partner – make time for each other
  - Breastfeeding

### Application of the Nursing Process

- Assessment
  - Assessment tools
    - Beck Depression Inventory
    - Hamilton Depression Scale
    - Geriatric Depression Scale
    - Zung’s Self-Rating Depression Scale
    - Patient Health Questionnaire PHQ-9
    - Edinburgh Postnatal Depression Scale (EPDS)
  - Suicidal assessment
  - Ideation related to harm of others
  - Mood and affect
    - Anxiety, worthlessness, guilt, helplessness, anger, irritability
    - May not make eye contact, flat affect
  - Thought content and processes
    - Slow thinking, rumination on faults, indecisiveness, delusional thinking
  - Physical signs and symptoms
    - Anergia, psychomotor retardation, psychomotor agitation, “vegetative” signs of depression, sleep pattern changes
  - Characteristic communication styles
    - Monotone speech, more time required to respond
- Assessment Guidelines
  - Evaluate the patient’s risk of suicide or harm to others
  - Determine if the depression is primary or secondary to another disorder
  - Assess for history of depression
  - Assess support systems
  - Assess for triggering events
  - Complete a psychosocial assessment
- Nursing Diagnoses
  - Nursing diagnoses can be numerous. Individuals with depression are always evaluated for the risk of suicide.
  - Other common diagnoses include:
    - Despair
    - Depressed mood
    - Hopelessness

- Helplessness
  - Risk for suicide
  - Risk for self-mutilation
  - Self-care deficit
- Goals
  - No physical harm to self
  - Discusses the losses
  - No longer idealizes or obsesses about the lost entity
  - Sets realistic goals for self
  - Attempts new activities without fear of failure
  - self-control over life situation
  - Interacts appropriately with others
  - Maintains reality
  - Able to concentrate, reason, and solve problems
- Interventions
  - Communication
  - Health teaching and health promotion
  - Milieu therapy
  - First-line psychotherapy interventions
    - Cognitive Behavioral Therapy (CBT)
    - Interpersonal psychotherapy (IPT)
  - Mindfulness-Based Cognitive Therapy
  - Group therapy
- Communication Techniques: Table 15-3, 15-4
  - Communication Guidelines
    - Person with depression may speak and comprehend very slowly.
    - Extreme depression—Person may be mute.
    - Sitting with a patient in silence is a valuable intervention.
    - This time spent together can be meaningful to the depressed person.
    - When a patient is mute, use the technique of making observations.
    - “There are many new pictures on the wall” or “I see that you are wearing new shoes”
    - Avoid saying “Things will look up” or “everyone gets down once in a while”
    - Use simple concrete words and allow time for the client to respond
- Interventions
  - Allow client to cry
  - Encourage independence in the performance of ADLs.
  - Help the client set goals.
  - Help the client identify areas of his or her life that they can and cannot control.
  - Convey an attitude of acceptance
  - Close observation
  - Encourage expression of feelings
  - Spend time with the client
- Physical Needs
  - Small, high calorie, high protein foods
  - Weigh patient weekly
  - Encourage patient to get up and dress in the morning and stay out of bed during the day
  - Use of relaxation in the evening
  - Encourage self-care
  - Encourage intake of fluids
  - Offer foods high in fiber
  - Encourage periods of exercise

- Resources
  - Provide
    - Suicide hotline
    - Support groups
    - Therapists/ counselors
- Evaluation
  - Self-harm
  - Suicidal ideations
  - When to seek assistance
  - Goals
  - Positive aspects about self
  - Identify areas of life where the client has control
  - Basic needs

### Psychopharmacology

- Antidepressants
  - Note about safety:
    - Antidepressants might *contribute* to suicidal behavior.
    - FDA provides a “black box” warning.
    - FDA recommends close observation for worsening depression or suicidal thoughts.
  - Medications that treat depression by enhancing mood
  - Five main groups:
    - Selective serotonin reuptake inhibitors (SSRIs)
    - Serotonin-norepinephrine reuptake inhibitors (SNRIs)
    - Atypical antidepressants
    - Tricyclic antidepressants (TCAs)
    - Monoamine oxidase inhibitors (MAOIs)
- SSRIs
  - First line drug therapy
  - Selectively blocks the reuptake of serotonin
  - Causes fewer adverse effects
  - Frequent side effects
    - Sexual dysfunction
    - CNS stimulation
      - Insomnia
      - Agitation
      - Anxiety
    - Weight loss early in therapy and then weight gain
  - Patient teaching
    - Avoid alcohol
    - Monitor for Suicidal thinking
    - Do not take with a MAOI
    - Discuss all medications with provider
    - Side effects: Insomnia, sexual dysfunction, GI disturbances
    - Do not discontinue abruptly
      - Serotonin Withdrawal Symptoms
        - Nausea, headache, dizziness, visual disturbances, tremors
      - Taper dose gradually
  - Toxic Effect: Serotonin Syndrome
    - Rare & Life threatening
    - Can begin 2-72 hours after starting treatment
    - Symptoms
      - Mental confusion, delirium

- Fever
  - Tachycardia
  - Hypertension
  - ↑ RR
  - Seizures
  - Death
  - Treatment: treat the symptoms
- Examples:
  - Citalopram (Celexa)
  - Escitalopram (Lexapro)
  - Fluoxetine (Prozac)
  - Paroxetine (Paxil)
  - Sertraline (Zoloft)
- Tricyclic Antidepressants
  - Increase norepinephrine and serotonin
  - Initial improvement in 10-14 days
  - Full effects may take 4-8 weeks
  - Dosage is always low initially and increased gradually
  - Side effects:
    - Produce anticholinergic effects
    - Orthostatic hypotension
    - Sedation
    - Weight gain
  - Warnings:
    - Lethal in overdose
    - Contraindicated:
      - Pregnancy, with MAOIs, alcohol use, benzodiazepines, oral contraceptives
    - Abrupt withdrawal
      - Nausea, dysrhythmias, nightmares, cold sweats
    - Toxic Effects:
      - Cardiovascular (dysrhythmias, tachycardia, MI)
  - Examples:
    - Desipramine
    - Nortriptyline
    - Doxepin
    - Amitriptyline
- Monoamine Oxidase Inhibitors
  - Second-line medication
  - Role of MAO in the brain
    - MAOIs prevent breakdown of norepinephrine, serotonin, dopamine
    - Increased levels result in increased mood
    - Increased levels (tyramine) lead to HTN, HTN crisis, CVA, possible death
    - MAOIs inhibit the breakdown of tyramine in the liver
    - People taking MAOIs **must** restrict their intake of tyramine to prevent severe HTN
      - Aged cheese, processed meats, fermented/ pickled foods, alcohol (beer)
  - Side effects:
    - Orthostatic hypotension
    - Weight gain
    - Insomnia
    - Changes in cardiac rhythm
    - Sexual dysfunction
    - Hypomanic & manic behaviors
  - Toxic Side Effects: Hypertensive Crisis

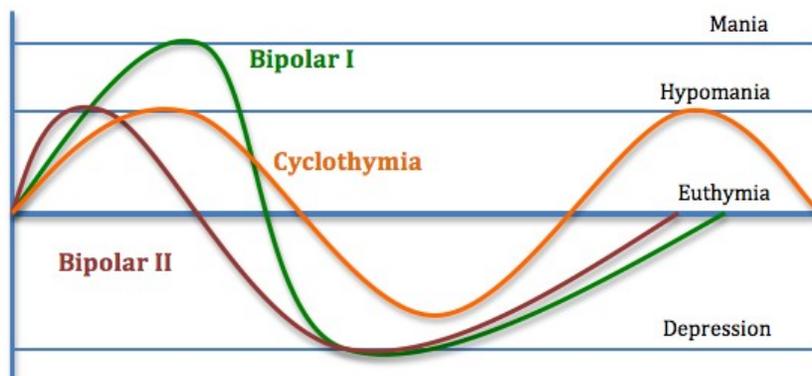
- Initially:
    - Irritability, anxiety, flushing, sweating, fever
  - Followed by:
    - High fever, seizures, coma, death
  - Treatment
    - Gastric lavage and activated charcoal
    - Hypothermic blankets
    - Antihypertensives- Nifedipine SL
    - Benzodiazepines
- Examples:
  - Isocarboxazid (Marplan)
  - Phenelzine (Nardil)
  - Tranylcypramine (Parnate)
  - Selegiline (EMSAM)
- SNRI
  - Blocks the reuptake of serotonin and norepinephrine
  - Side Effects:
    - Insomnia
    - Nausea, anorexia, weight loss
    - Hypertension
    - Headache, dizziness, blurred vision
    - Sexual dysfunction
  - Adverse Effects:
    - Withdrawal Symptoms
      - Headache, nausea, visual disturbances, anxiety, dizziness, tremors
    - Interactions
      - Taking venlafaxine and NSAIDs/ anticoagulants, increase risk for bleeding
      - SNRI & St. John's Wort can cause serotonin syndrome
  - Examples:
    - Venlafaxine (Effexor)
    - Duloxetine (Cymbalta)
- Atypical Antidepressants
  - Less sexual dysfunction side effects than other antidepressants
  - Side Effects:
    - Headache, dry mouth
    - GI distress, constipation, N/V, anorexia, weight loss
    - Tachycardia, HTN
    - Restlessness, insomnia
  - Examples:
    - Mirtazapine (Remeron)
    - Bupropion (Wellbutrin)
    - Trazodone
    - Vilazodone
- Other Therapies
  - Electroconvulsive Therapy
    - Most effective acute treatment for depression
    - Special Considerations:
      - HTN, CHF, arrhythmias, brain tumors
    - Procedure
      - \*Informed Consent\*
      - General anesthetic and muscle-paralyzing agent
      - Brief seizures (30-60 seconds) are induced by an electrical current (1 second)
      - 2-3 treatments/ week- total of 6-12 treatments

- Monitor VS
- Post procedure: retrograde amnesia
- o Transcranial Magnetic Stimulation
  - Non-invasive
  - Magnetic pulses stimulate specific areas of the brain
  - Contraindications
    - Cochlear implants, brain stimulators, medication pumps
  - Procedure
    - 30 minutes, 5 days/ week for 4-6 weeks
    - Patients are awake, electromagnet placed on the scalp, short magnetic pulses pass into the prefrontal cortex
    - Patient may feel slight tapping
    - Post-procedure: headache, light headedness, no memory problems
- o Light Therapy
  - First line treatment for Seasonal Affective Disorder (SAD)
  - Used in adjunct with medications for MDD
  - Treatment: 30-60 minutes/ day
  - As effective as medication in patients with SAD
- o Herbal Therapy
  - St. John's Wort
  - May be helpful mild depression
  - Not for MDD, women who are pregnant, or children
  - May reduce effectiveness of oral contraceptives
  - Can cause photosensitivity

### **Bipolar Disorders**

- Prevalence
  - o Bipolar disorder affects approximately 5.7 million American adults.
  - o First manic episode occurs:
    - Teens
    - 20's or 30's
  - o Chronic and recurrent
  - o Frequently underdiagnosed
  - o Strong genetic link
- Definition
  - o Bipolar disorder is characterized by mood swings from profound depression to extreme euphoria (mania), with intervening periods of normalcy.
  - o Delusions or hallucinations may or may not be part of clinical picture.
  - o A somewhat milder form of mania is called *hypomania*.
- Prevalence and Comorbidity
  - o Lifetime prevalence of bipolar disorders: ~4.4%
  - o Average age of onset: 18 years
  - o Male to female ratio

- Bipolar I: 1:1
    - Bipolar II: 1:2
  - Comorbidity
    - Other mental disorders
    - Medical: cardiovascular diseases, metabolic diseases, endocrine disorders; type 2 diabetes; obesity
- Theory
  - Risk factors
    - The cause of BSDs involves a complex interaction of poorly understood environmental, genetic and neurochemical factors.
  - Biological findings
    - Genetic factors: First-degree relatives
    - Neurobiological factors: Dopamine, norepinephrine, glutamate
    - Neuroendocrine factors: Hormones during pregnancy
    - Neuroanatomical factors: Gray matter & size of hippocampus and amygdala
- Bipolar I Disorder
  - Most severe
  - Marked shifts in mood, energy, and ability to function
  - Normal functioning alternates with periods of illness
  - High mortality rate
  - At least one episode of mania
    - Intense mood disturbances
    - 1 week for most of the day, every day
    - Marked impairment in social and occupational functioning
  - Manic episodes alternate with depressive states
  - Hospitalization is usually required
- Bipolar II Disorder
  - Severe and prolonged periods of depression that alternate with brief periods of hypomania
  - 1 hypomanic episode & I depressive episode
  - Hypomania
    - Less severe mania – euphoric, excess energy
    - Lasts for at least 4 days
  - Has never met criteria for full manic episode
- Cyclothymic Disorder
  - Mood swings between hypomania & mild to moderate depression for at least 2 years
- Rapid Cycling
  - At least 4 mood episodes in a 12-month period
  - Can occur over a month/ 24-hour period
  - Associated with more severe symptoms
  - High recurrence rate



- Diagnostic Criteria for Mania

- Elevated, expansive, or irritable mood, lasting for at least 1 week
- **AND** 3 or more of the following:
  - Inflated self-esteem
  - Decreased need for sleep
  - More talkative, pressured speech
  - Flight of ideas
  - Distractibility
  - Increase in goal-directed activity
  - Increased involvement in pleasurable activities
- Delirious Mania
  - Rare
  - Severe clouding of consciousness and intensified symptoms of mania
  - Labile mood
  - Panic anxiety
  - Disorientation/ confusion
  - Agitated, purposeless movements
- Diagnostic Criteria for Hypomania
  - A distinct period of abnormally and persistently elevated, expansive, or irritable mood and persistently increased activity or energy, lasting 4 consecutive days and present most of the days , nearly everyday.
  - During this time, 3 or more of these symptoms **must** be present:
    - Inflated self-esteem or grandiosity
    - Decreased need for sleep
    - More talkative
    - Flight of ideas
    - Easily distractible
    - Increased goal-directed activity
    - Excessive involvement in pleasurable activities
- Diagnostic Criteria for Major Depression
  - 5 or more of the following **must** be present during the same 2-week period:
    - Depressed mood
    - Change in weight
    - Insomnia/ hypersomnia
    - Psychomotor agitation or retardation
    - Fatigue
    - Feelings of worthlessness
    - Diminished ability to concentrate
    - Recurrent thoughts of death
- Thought content and Thought Process
  - Thought content may include delusions or hallucinations
  - 50% of patients during the manic phase have psychotic symptoms
  - Delusions of Grandeur
    - Highly inflated self-regard
  - Paranoid Delusions
  - Hallucinations
  - Pressured Speech
    - Nonstop, loud, hard to interrupt
  - Flight of ideas
    - Accelerated speech, abrupt changes from topic to topic
  - Clang associations
    - Stringing together of rhyming words
  - Tangential speech
    - Loose the point they were trying to make

- Nursing Diagnosis
  - **Risk for Injury** related to
    - Extreme hyperactivity, increased agitation, and lack of control over purposeless and potentially injurious movements
  - Prevention of exhaustion and death from cardiac collapse
  - Remain in a secure area when unaccompanied
  - Re-direct from unsafe activities
  - Encourage short rest periods
  - **Imbalanced nutrition less than body requirements**
    - Weight loss
  - **Disturbed thought processes**
    - delusions of grandeur and persecution
    - inaccurate interpretation of the environment
  - **Disturbed sensory perception**
    - auditory and visual hallucinations
- Outcomes
  - Well hydrated within 24 hours
  - Prevent cardiac complications
    - Monitor BP & HR
  - 6-8 hours of sleep a night
  - Provide a quiet milieu
  - Demonstrate self-control with aid of staff or medication
  - Make no attempt at self-harm with aid of staff or medication
  - Is no longer exhibiting signs of physical agitation
  - Eats a well-balanced diet with snacks to prevent weight loss and maintain nutritional status
  - Verbalizes an accurate interpretation of the environment
  - Verbalizes that hallucinatory activity has ceased and demonstrates no outward behavior indicating hallucinations
  - Accepts responsibility for own behaviors
  - Does not manipulate others for gratification of own needs
  - Interacts appropriately with others
- Outcomes: Long Term
  - Focus on relapse prevention
  - Limit the severity and duration of future episodes
    - Coping skills
    - Support groups
    - Medication compliance
- Milieu Management
  - Safety
  - Consistency among staff
  - Reduce environmental stimuli
    - Solitary/ noncompetitive activities
    - Reduce noise level, bright lights, loud people
  - Redirect aggressive behavior
  - Administer PRN medication to reduce harm
- Interventions
  - Remove all dangerous objects from the environment.
  - If restraint is deemed necessary, ensure that sufficient staff are available to assist.
  - Set limits on manipulative behaviors.
  - Do not argue, bargain, or try to reason with the client.
  - Provide positive reinforcement.

- Communication
  - Use firm and calm approach
  - Use short and concise explanations or statements
  - Remain neutral; avoid power struggles and value judgments
  - Be consistent in approach and expectations
  - Have frequent staff meetings
  - With other staff, decide on limits, tell patient in simple, concrete terms with consequences
  - Firmly redirect energy into more appropriate and constructive channels
  - Use distraction techniques as a tool to de-escalate
- Provide client with high-protein, high-calorie foods.
- Maintain an accurate record of intake, output, and calorie count.
- Monitor sleep patterns.
- Clear, concise directions and comments
- Do not Reinforce hallucinations or delusions
- Redirect patients into more “healthy” activity such as a brisk walk, listening to music, coloring
- When a patient’s activity begins to escalate, the staff need to employ additional interventions
- De-escalation, sedating medication, restraints
- Evaluation
  - Has the client avoided personal injury?
  - Has violence to client or others been prevented?
  - Has agitation subsided?
  - Have nutritional status and weight been stabilized?
  - Have delusions and hallucinations ceased?
- A client diagnosed with bipolar disorder has a nursing care plan that includes several nursing diagnoses listed. Match the nursing diagnosis to the level of priority (1 to 4)
  - Deficient Knowledge: \_\_\_\_\_
  - Nonadherence: \_\_\_\_\_
  - Risk for Injury: \_\_\_\_\_
  - Self-care deficit: \_\_\_\_\_

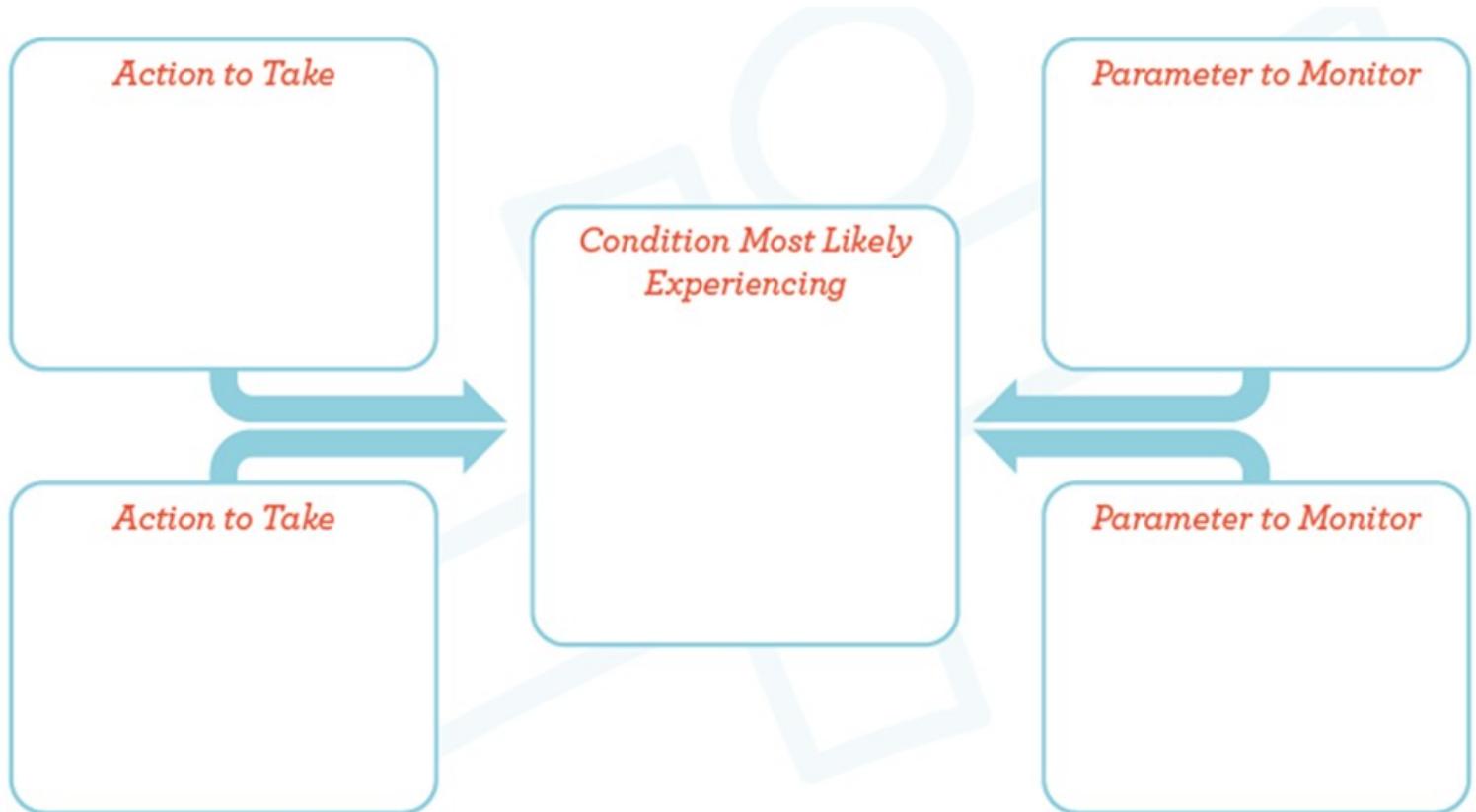
### Treatment Modalities

- Therapy
  - Individual psychotherapy
  - Group therapy
  - Family therapy
  - Cognitive Behavioral therapy
    - Accept diagnosis
    - Monitor mood
    - Problem-solving skills
    - Social skills
    - Routine
- Psychopharmacology
  - For mania
    - Lithium carbonate
    - Anticonvulsants
    - Antipsychotics
  - For depressive phase
    - Use antidepressants with care (may trigger mania).
- Lithium
  - Blood Levels
    - Therapeutic blood level: 0.6 to 1.0 mEq/L
    - Toxic blood level: 1.5 to 2.5 mEq/L

- o A typical lithium dose is 300mg 3-4 times a day
- o The window between therapeutic levels and toxic levels is very small, plasma levels should be monitored routinely
  - 2-3 days until therapeutic range has been reached
  - Maintenance: 1-3 months
- o Expected SE: <0.4-1.0 mEq/L
  - Fine hand tremor
  - Polyuria
  - Mild thirst
  - Mild nausea and general discomfort
  - Weight gain
- o Signs of Early Toxicity: <1.5 mEq/L
  - N/V/D
  - Thirst
  - Polyuria
  - Slurred speech
  - Muscle weakness
  - Coarse hand tremors
  - Mental confusion
  - Incoordination
  - Interventions
    - Medication should be withheld, blood lithium levels measured, and dosage reevaluated.
    - Dehydration, if present, should be addressed
- o Severe Toxicity: >2.0 mEq/L
  - Ataxia
  - Serious EEG changes
  - Blurred vision
  - Clonic movements
  - Large output of dilute urine
  - Seizures
  - Severe hypotension
  - Coma - death
  - Interventions
    - Gastric lavage
    - Hemodialysis
- o Client/Family Education
  - Lithium
    - Take the medication regularly.
    - Do not skimp on dietary sodium.
    - Drink six to eight glasses of water each day.
    - Notify physician if vomiting or diarrhea occur.
    - Have serum lithium level checked every 1 to 2 months, or as advised by physician.
    - Do not take with diuretics
- Anticonvulsant Drugs
  - o Valproates: Divalproex (Depakote)
    - SE: nausea, vomiting, indigestion, hepatotoxicity, pancreatitis, thrombocytopenia, weight gain
    - Teaching:
      - Monitor liver functions
      - Monitor amylase
      - Monitor platelets
  - o Carbamazepine (Tegretol)
    - SE: double vision, vertigo, headache
      - more severe: aplastic anemia & agranulocytosis

- Teaching:
        - Gradually increase dose
        - Administer at bedtime
        - CNS effects should subside in a few weeks
        - Avoid grapefruit juice
        - Monitor CBC periodically
    - Lamotrigine (Lamictal)
      - SE: double vision, dizziness, headache, nausea, vomiting, skin rash (Stevens-Johnson Syndrome)
      - Teaching:
        - Hold medication- rash
  - Antianxiety Drugs
    - Clonazepam (Klonopin) and Lorazepam (Ativan)
      - Useful in the acute treatment of mania
      - Effective with psychomotor agitation
  - Atypical Antipsychotics
    - Help with insomnia, anxiety, and agitation
      - Risperidone (Risperdal)
      - Ziprasidone (Geodon)
      - Aripiprazole (Abilify)
      - Olanzapine (Zyprexa)
- } FDA approved for maintenance therapy in bipolar disorder
- Antipsychotics
    - Do not discontinue drug abruptly
      - Even if symptoms subside
    - Causes photosensitivity
    - Rise slowly from a sitting or lying position.
    - Avoid alcohol and over-the-counter medications.
    - May cause EPS
    - SE: metabolic syndrome
  - Patient Story
    - David, age 33 years, arrives to the ED after an attempted suicide. He tried to hang himself, but the rope could not hold his weight. After that, he planned to borrow a friend’s gun and shoot himself, but his friend became aware of this plan and brought him to the ED.
    - David states that he has not slept in 48 hours and admits to drinking “a lot” every day. His diet consists of fast food or “anything cheap”. He struggles with his mood and was admitted 3 months ago for a suicide attempt. He is frequently depressed, followed by periods of high energy.
    - David was recently prescribed lithium
    - Assessment Data
      - David is unkempt and his clothes are dirty.
      - David has lost 16 pounds in 2 months
      - He has not slept in 48 hours
      - He is restless and is having muscle spasms
      - BP: 140/86
      - HR: 85
      - RR: 14
      - Creatinine: 1.8 mg/dL
      - Sodium: 154 mg/dL
      - Lithium level: 1.7 mEq/L
      - Glucose: 142
    - Medication List
      - Multivitamin PO daily
      - Lithium 300mg PO Q8 hours
      - Paroxetine 12.5mg PO daily

- Quetiapine 50mg PO daily at bedtime
- o Questions
  - What assessment finding requires immediate follow up?
  
  - What is the client at risk for developing? Why?
  
  - The nurse should address \_\_\_\_\_ first & \_\_\_\_\_ second.
  
- o Bow Tie



### Eating Disorders

- Definitions
  - o Anorexia Nervosa (AN)
    - Intense irrational beliefs about weight
    - Self-starvation
  - o Bulimia Disorder (BD)
    - Binging & induced vomiting
  - o Binge-eating disorder (BED)
    - Binge eating causes significant distress
    - Obesity
  
- Prevalence
  - o Eating disorders affect up to 30 million Americans
  - o 1 in 5 women
  - o Bullying in schools

- Of 10-year-old children, 81% are afraid of being “fat”
- ↑ to 60% of girls (6-12yrs) are concerned about their weight
- 10-15% of those with AN & BN are male
- 61% of adult Americans are either overweight or obese
- Theory
  - Genetic Models
    - Genetic vulnerability- 60%
  - Neurobiological
    - Serotonin function
  - Psychological Factors
    - Defense mechanism
    - Cognitive-behavioral theorists
      - Learned behavior & positive reinforcement
- Comorbidity
  - Co-morbid psychiatric illnesses
    - Anxiety disorder
    - Major depressive disorder or dysthymia (50 - 75%)
    - Sexual abuse history (20 - 50%)
    - Obsessive–compulsive disorder
    - Substance use disorders
    - Bipolar disorder
  - Eating disorders are also associated with a high risk for suicide and self-harm.
- Cultural Considerations
  - Industrialized societies where there is an
    - abundance of food
    - being thin is considered attractive
  - Female athletes
    - running
    - gymnastics
    - ballet and
  - Male athletes
    - body builders
    - wrestlers
- Anorexia Nervosa
  - Refusal to maintain a minimally normal weight
  - Chronic illness
  - 1-year relapse rate is 50%
  - Long term treatments
    - OP psychotherapy
    - Pharmacological interventions
  - DSM-5 Criteria:
    - Restriction of food resulting in significantly low BMI
    - Intense fear of gaining weight
    - Lack of recognition of low body weight
  - Possible signs and symptoms:
    - Preoccupation with thoughts of food
    - Peculiar handling of food:
      - Cutting food into small bits
      - Pushing pieces of food around plate
    - Possible development of rigorous exercise regimen
    - Possible self-induced vomiting; use of laxatives and diuretics
    - Cognitive distortions: individual judges own self-worth by weight

- Physical symptoms
- Bulimia Nervosa
  - Binging & induced vomiting
  - DSM-5 Criteria
    - Recurrent episodes of binge eating
      - Eating frequently- large amounts
      - Lack of control when eating
    - Behaviors to prevent weight gain
      - Self-induced vomiting, use of laxatives/ diuretics
      - Once a week for 3 months
    - Mild → Severe → Extreme
  - Possible signs and symptoms:
    - Depressive signs and symptoms
    - Problems with:
      - Interpersonal relationships
      - Self-concept
    - Increased levels of anxiety
    - Possible co-morbidities
      - Substance use disorder
      - MDD
      - Bipolar
    - Russell's Sign
- Medical Complications

| Assessment Finding   | Anorexia | Bulimia |
|----------------------|----------|---------|
| Weakness             |          |         |
| Lanugo               |          |         |
| Russell's Sign       |          |         |
| Hair loss            |          |         |
| Muscle wasting       |          |         |
| Dehydration          |          |         |
| Hypokalemia          |          |         |
| Bradycardia          |          |         |
| Arrhythmias          |          |         |
| Constipation         |          |         |
| Cognitive impairment |          |         |
| Renal failure        |          |         |

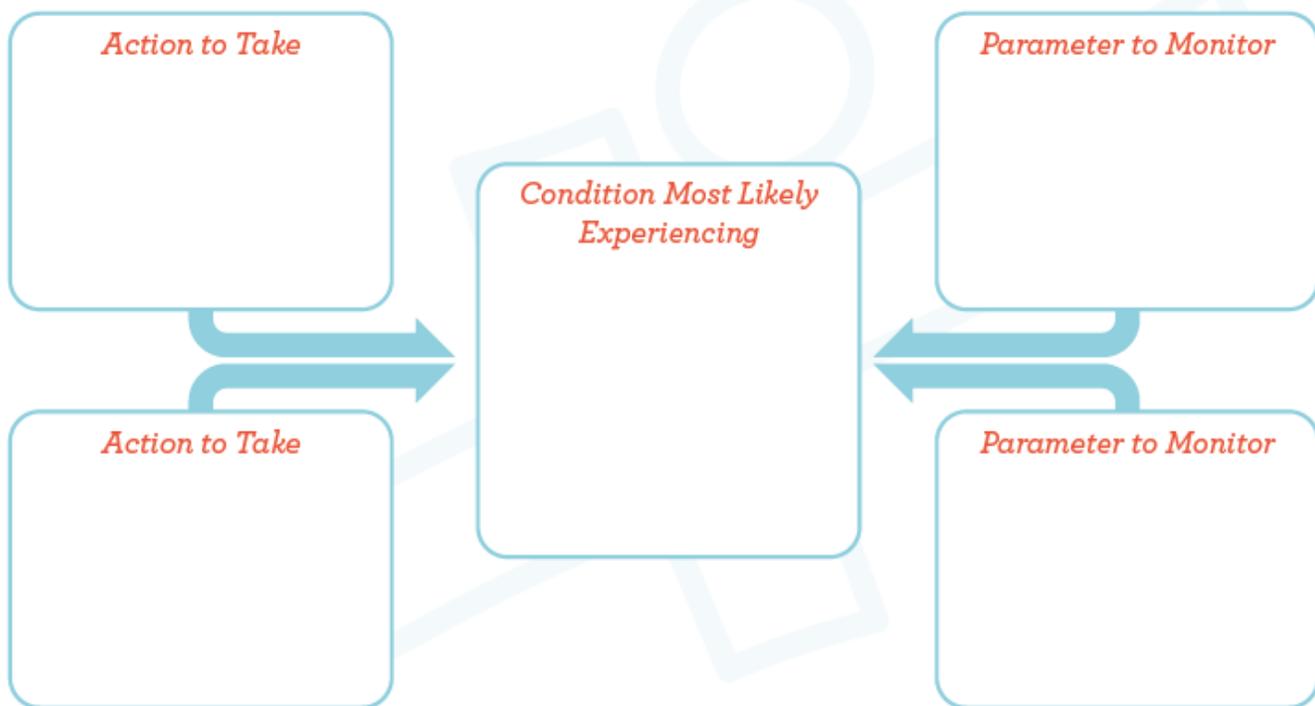
- Binge Eating Disorder
  - DSM-5 Criteria
    - Recurrent episodes of binge eating
      - Eating frequently
      - Lack of control overeating
    - Binge eating episodes are associated with >3 of the following:
      - Eating rapidly
      - Eating until uncomfortably full
      - Eating large amounts when not hungry

- Eating alone
  - Feeling depressed or guilty
  - Marked Distress
  - Once a week x 3 months
- Compensatory mechanisms are not used
- Usually co-occurring with psychiatric disorders:
- bipolar disorder
- depressive disorder
- anxiety disorder
- substance use disorders
- Body Mass Index
  - Anorexia nervosa is characterized by a BMI of 17 or lower
  - A BMI range for normal weight is 20 to 24.9.
  - *Overweight* is defined as a BMI of 25.0 to 29.9.
  - Obesity is defined as a BMI of 30 or greater.
- Nursing Diagnoses
  - Imbalanced nutrition: Less than body requirements
    - Refusal to eat
  - Deficient fluid volume (risk for or actual) related to
    - decreased fluid intake
    - self-induced vomiting
    - laxative and/or diuretic abuse
  - Imbalanced nutrition: More than body requirements
    - compulsive overeating
  - Disturbed body image/low self-esteem
    - dysfunctional family system, or
    - feelings of dissatisfaction with body appearance
  - Anxiety (moderate to severe)
    - helplessness
    - lack of control over life events
- Goals: Anorexia and Bulimia
  - Has achieved and maintained at least 85-90% of ideal body weight
  - Normalize eating patterns by eating 75% of three meals per day plus two snacks.
  - Has vital signs, blood pressure, and labs within normal limits
  - Refrain from self harm
  - Verbalizes events that precipitate anxiety and demonstrates techniques for its reduction
    - Verbalizes ways in which he or she may gain more control of the environment
    - Less preoccupation with own appearance
- Outcomes: Binge Eating Disorder
  - The Client
    - Has established a healthy pattern of eating
    - Verbalizes plans for future maintenance of weight control
- Hospitalization may be necessary in cases of:
  - Malnutrition
  - Dehydration
  - Severe electrolyte imbalance
  - Cardiac arrhythmia or severe bradycardia
  - Hypothermia
  - Hypotension
  - Suicidal ideation
- Medical Intervention
  - Stabilization

- IV lines, feeding tubes
  - Labs: Electrolytes
  - Refeeding and weight restoration
    - Normalize eating patterns, as evidenced by eating 75% of three meals per day plus two snacks.
    - Achieve 85% to 90% of ideal body weight.
    - Monitor for refeeding syndrome
- Interventions
  - Determine appropriate calories to provide adequate nutrition and weight gain.
  - Keep a strict record of intake and output.
  - Avoid arguing or bargaining with the client.
  - Utilize cognitive-behavioral therapy
    - Changes distorted thought processes
  - Acknowledge the emotional & physical difficulty the patient is experiencing **\*\*Establish a therapeutic relationship\*\***
  - Weigh daily x1 week and then 3 times/ week
    - Weigh in morning before oral intake
  - Measure VS TID until stable
  - Repeat ECG & labs until stable
  - Provide a calm environment during mealtimes
  - Observe patient during mealtimes
  - Monitor weight gain
    - 2-3 lb/week
- Interventions: Binge-eating disorder
  - Cognitive behavioral therapy
    - Begin a food journal
  - Plan meals ahead of time
  - Eat small amounts more frequently
  - Review nutritional content
  - Weigh weekly
- Communication Guidelines
  - Milieu Therapy:
    - Highly structured unit, precise mealtimes, adherence to selected menu
    - Observe patients during and after mealtime
    - Interdisciplinary team approach
  - Avoid authoritarianism and assumption of a parental role
  - Realize the patient's main fear is gaining weight which is our #1 outcome
- Treatment Modalities
  - Individual therapy
    - Helpful when underlying psychological problems are contributing to the maladaptive behaviors
  - Family therapy
    - Involves educating the family about the disorder
    - Assesses the family's impact on maintaining the disorder
  - Psychopharmacology
    - Fluoxetine (AN & BN)
    - Lisdexamfetamine (Vyvanse) (binge-eating disorder)
- Patient Story
  - Bryn is a 15-year-old female who has struggled with anorexia nervosa and depression since she was 10.
  - Bryn presents to the ED with increasing weakness, lightheadedness, and dizziness.
  - Bryn has admitted to using laxatives every day and vomiting after meals.
  - Bryn is 5'3" and weighs 83 pounds/ 37.7 kg (BMI 14.7)

- o You overhear Bryn talking to her mother, “I hate everything about me! I am so tired of living. I wish I were dead.”
- o VS
  - 0800: T- 96.2 F, P- 50 (regular), R- 17, BP- 84/46, O2- 99% on RA
  - 1100: T- 96.0 F, P- 48, R- 14, BP- 74/42, O2- 100% on RA
- o Labs
  - Na: 132
  - K: 2.2
  - Glucose: 65
  - Creatinine: 1.5
  - Mg: 1.2
- o Priority Orders: Which order do you implement first, why?
  - \_\_\_\_\_ Establish peripheral IV, Rationale:
  - \_\_\_\_\_ 0.9% NSS 1,000mL bolus, Rationale:
  - \_\_\_\_\_ Apply cardiac monitor, Rationale:
  - \_\_\_\_\_ Magnesium Sulfate 4gm IVPB over 4 hours, Rationale:
  - \_\_\_\_\_ Potassium Chloride 10 mEq IVPB over 1 hour, Rationale:
  - \_\_\_\_\_ Mental health assessment and referral, Rationale:
  - \_\_\_\_\_ 1:1 sitter, Rationale:

o NGN: Bowtie



### Schizophrenia

- Characterized by psychosis
  - o Altered cognition
  - o Altered perception
  - o Impaired ability to determine what is or is not real
- Nature of the disorder
  - o With schizophrenia, there is a severe deterioration of social and occupational functioning.
  - o In the United States, the lifetime prevalence of schizophrenia is about 1%.
  - o Usually diagnosed between 15-25 years old.
- Introduction

- Schizophrenia requires treatment that is comprehensive and presented in a multidisciplinary effort.
- Of all mental illnesses, schizophrenia causes more:
  - Lengthy hospitalizations
  - Chaos in family life
  - Exorbitant costs to people and governments
  - Fears
- Comorbidities
  - Substance use disorders
    - Apparent in 50% of people with schizophrenia
    - 60% use nicotine
  - Anxiety, depression, suicide
    - 20% attempt suicide
  - Polydipsia
    - 20% of individuals
      - Symptoms: confusion, hallucinations, delirium
- Predisposing Factors
  - Biological influences
    - Biochemical influences
      - ↑ dopamine
      - ↑ Serotonin
      - Increased C4 activity:
        - Prolonged synaptic pruning leads to symptoms of schizophrenia
        - Synaptic pruning normally happens in adolescents
    - Physiological influences
      - Factors that have been implicated include:
        - Viral infection
        - Anatomical abnormalities
        - Head injury in adulthood
  - Genetic influences
    - Strong genetic component
    - How it is inherited is uncertain
    - Genetic markers for schizophrenia
      - New research in identifying regions on chromosomes that are related to the development of schizophrenia
- Assessment
  - The major symptoms of Schizophrenia can be grouped into 2 categories:
    - Positive Symptoms
    - Negative Symptoms
- Positive Symptoms
  - Disturbances in Content of Thought
    - Delusions: False personal beliefs
      - Persecutory
      - Grandiose
      - Somatic
      - Paranoid
  - Form of thought
    - Concrete thinking: Literal interpretations of the environment
    - Echolalia: Repeating words that are heard
    - Loose association: Shift of ideas from one unrelated topic to another
    - Neologisms: Made-up words
    - Clang associations: Choice of words is governed by sound
    - Word salad: Group of words put together randomly

- Circumstantiality: Delay in reaching the point of a communication because of unnecessary and tedious details
  - Tangentiality: Inability to get to the point of communication
  - Mutism: Inability or refusal to speak
  - Magical thinking: Ideas that one's thoughts or behaviors have control over specific situations
  - Thought blocking: Stoppage of thought
- Alterations in Perception
  - Hallucinations: False sensory perceptions not associated with real external stimuli
    - Auditory
    - Visual
    - Tactile
    - Gustatory
    - Olfactory
  - Illusions: Misperceptions of real external stimuli
- Cues
  - Important for the nurse to know if the patient is hallucinating
  - Turning or tilting of the head
  - Frequent blinking of the eyes and grimacing
  - May verbally respond to "unseen others"
- Negative Symptoms
  - The absence of essential human qualities
    - Anhedonia
    - Avolition
    - Affective blunting
    - Apathy
    - Alogia
  - Affect: Outward expression of a person's internal emotional state
    - Flat
    - Blunted
    - Inappropriate
    - Bizarre
  - Impaired interpersonal functioning and relationship to the external world
    - Impaired social interaction
    - Social isolation
  - Deterioration in appearance: Impaired personal grooming and self-care activities
- Cognitive Symptoms
  - Concrete thinking
  - Impaired memory
  - Impaired information processing
  - Impaired executive functioning
- Associated Features
  - Waxy flexibility
    - Passive yielding of all movable parts of the body to any effort made at placing them in certain positions
  - Posturing
    - voluntary assumption of inappropriate or bizarre postures
  - Pacing and rocking
    - Pacing back and forth and rocking the body
  - Regression
    - Retreat to an earlier level of development
  - Eye movement abnormalities
- DSM-5 Criteria

- o 2+ of the following: (must have 1, 2, Or 3)
  - Delusions
  - Hallucinations
  - Disorganized speech
  - Catatonic behavior
  - Negative symptoms
- o Level of functioning is affected
- o Continuous signs persist for at least 6 months
- Nursing Diagnoses
  - o Disturbed Sensory Perception (auditory and visual)
  - o Disturbed Thought Processes
  - o Social isolation
  - o Risk for violence
  - o Impaired verbal communication
  - o Self-care deficit
  - o Interrupted Family Processes
  - o Ineffective health maintenance
- Goals
  - o The client
    - Recognizes distortions of reality
    - Has not harmed self or others
    - Perceives self realistically
    - Demonstrates ability to perceive the environment correctly
    - Maintains anxiety at a manageable level
    - Demonstrates ability to trust others
    - Uses appropriate verbal communication
    - Performs self-care activities independently
- Course of Illness
  - o Prodromal phase
    - Precedes the acute phase of schizophrenia
    - Deterioration in role functioning and social withdrawal
    - Sleep disturbance, anxiety, irritability
    - Depressed mood, poor concentration, fatigue
    - May appear 1 month – 1 year before the first psychotic break
  - o Acute Phase
    - In the active phase of the disorder, psychotic symptoms are prominent.
      - Positive symptoms
      - Negative symptoms
      - Cognitive symptoms
      - Mood symptoms
    - Goal: safety & stabilization
    - Hospitalization may be required
    - Interventions
      - Structured milieu
        - o Set limits
        - o Decreases anxiety levels
      - Monitor for suicide risk
      - Medications
        - o Monitor for side effects
      - Provide support
      - Aggressive patients
        - o Reduce stimuli

- Promote verbal expression of emotions
  - Provide safe outlet for physical energy
  - Practice coping skills to reduce stress
- Stabilization Phase
  - Symptoms diminish
  - Focus is shifted → understanding the illness
    - Optimal medication & treatment regimen
    - Controlling/ coping with symptoms
    - Reduce negative symptoms
- Maintenance Phase
  - Maintaining and increasing symptom control
  - Patient
    - Adheres to medication & treatment regimen
    - Increasing independence
    - Building relationships with care providers & support people
    - Improving quality of life
- Stabilization and Maintenance Phase
  - Relapse Prevention
    - Know early warning signs
    - Build support system
    - Relapse is part of the illness – do not get discouraged
    - Develop a plan
  - Interventions
    - Therapeutic Milieu
      - Safety
      - Learning & practicing skills
      - Therapeutic activities
    - Therapeutic communication
- Intervening with hallucinations
  - Identify what the voices are saying
  - Close monitoring, help the patient feel safe
  - Call the patient by name
  - Speak simply and loudly
  - Maintain eye contact
  - Convey empathy
  - Distract the client from hallucinations/ delusions
    - Walk, play music, draw, play a game
- Intervening with delusions
  - Convey empathy, focus on the emotion the patient is feeling & accept their feelings
  - Do not argue or prove the delusion is incorrect
  - Clarify misinterpretations
  - Do not dwell excessively on the delusion
  - If the patient is paranoid
    - Offer food/ drinks in closed containers
  - Maintain calm attitude.
- Intervening with associative looseness
  - Do not pretend that you understand when you are confused
  - Tell the patient that you are having difficulty understanding
  - State “I’m having difficulty following what you are saying”
  - Look for recurring topics and themes
  - Emphasize what’s happening in the here and now
  - Involve the patient in simple reality-based activities
  - Tell the patient what you do understand

- reinforce clear communication and accurate expression of needs, feelings, and thoughts
- o Milieu Management
  - Be calm
  - Keep promises & be consistent
  - Be reliable & honest
  - Orient the person to time, person, and place if indicated
  - Do not touch patients without warning them
  - Avoid whispering or laughing when patients are unable to hear all of the conversation
  - Reinforce positive behaviors
  - Avoid competitive activities
- o Client and Family Education
  - Management of the illness
    - Connection of exacerbation of symptoms to times of stress
    - Appropriate medication management
    - Side effects of medications
    - Importance of not stopping medications
    - When to contact health-care provider
    - Relaxation techniques
    - Social skills training
    - Daily living skills training
    - Recognize signs of relapse
- o Pharmacologic Therapy
  - Antipsychotic Medications
    - Alleviate symptoms of schizophrenia but cannot cure underlying psychotic processes.
    - Antipsychotic drugs are effective in:
      - o Acute exacerbations of schizophrenia
      - o Preventing or mitigating a relapse

### Conventional Antipsychotic Medications

- Conventional (First-gen) Antipsychotic
- Targets positive symptoms
- How do they work?
  - o Antipsychotics block Dopamine receptors in the mesolimbic area (dopamine antagonist)
    - This treats psychotic symptoms
  - o Mesolimbic pathway
    - Reward Pathway!
      - D2 antagonism can result in:
        - o Apathy
        - o Anhedonia
        - o Amotivation
- Side Effects: EPS
  - o Acute Dystonia: severe spasms of tongue, neck, face, or back (tongue and jaw first), drooling
  - o Parkinsonism- bradykinesia, rigidity, shuffling gait, drooling, tremors
  - o Tardive dyskinesia (TD)- movement disturbance: slip smacking, sucking, puckering, tongue protrusion, worm-like movements in the tongue, and chewing.
  - o Akathisia: internal & external restlessness (pacing or fidgeting)
  - o Agranulocytosis (esp. with clozapine)
- Neuroleptic Malignant Syndrome
  - o Symptoms: sudden high-grade fever, BP fluctuations, tachycardia, muscle rigidity, diaphoresis, drooling, change in LOC, coma
  - o Nursing considerations:
    - Stop medication immediately
    - Monitor VS

- Apply cooling blanket
- Administer antipyretics
- Increase fluid intake
- Administer diazepam for anxiety
- Administer dantrolene to induce muscle relaxation
- Examples: Trifluoperazine, Loxapine, Chlorpromazine
- Treatment of EPS
  - Side effects often appear early in therapy and can be minimized with treatment.
  - Treatment usually consists of:
    - Lowering the dose
    - Benztropine (Cogentin) for Parkinsonism
    - Diphenhydramine IM for Acute Dystonia Reactions
    - Tardive Dyskinesia (TD)
      - Valbenazine (Ingrezza)
      - Deutetrabenazine (Austedo)
- High Potency
  - Trifluoperazine
  - Thiothixene (Navane)
  - Fluphenazine (Prolixin)
  - Haloperidol (Haldol)
  - Pimozide (Orap)
- Medium Potency
  - Loxapine (Loxitane)
  - Molidone (Moban)
  - Perphenazine (Trilafon)
- Low Potency:
  - Chlorpromazine (thorazine)
  - Thioridazine (Mellaril)

### Atypical Antipsychotic Medications

- Target positive and negative symptoms
- How do they work?
  - Combination of the D2 antagonism with the 5HT2A antagonism
    - 5HT2A antagonism increases Dopamine in the nigrostriatal areas & prefrontal cortex (reducing negative symptoms)
- Atypical (Second-gen) Antipsychotic
- Atypical agents have fewer side effects.
- Produce minimal to no EPS symptoms
- Higher risk for metabolic syndrome
  - Weight gain, Diabetes, Dyslipidemia
- Long lasting injectables- beneficial for those who are not med compliant
  - Paliperidone (Invega) (1-3 months)
  - Olanzapine (Zyprexa) (2-4 weeks)
  - Risperidone (Risperdal) (2-4 weeks)
  - Aripiprazole (Aristada) (4-6 weeks)
- No EPS
  - Clozapine (Clozaril)
- Low EPS
  - Olanzapine (Zyprexa)
  - Quetiapine (Seroquel)
  - Ziprasidone (Geodon)
  - Aripiprazole (Abilify)
- Mild EPS:



- o Paliperidone (Invega)
- High EPS:
  - o Risperidone (Risperdal)
  - o Lurasidone (Latuda)
- Adjuncts to Antipsychotic Drug Therapy
  - o Antidepressants are administered for severe depression.
  - o Lithium and other mood stabilizers reduce aggressive behavior.
  - o Benzodiazepines for acute psychosis
    - Clonazepam decreases anxiety & agitation