Schizophrenia and other Psychotic Disorders
Objectives

• Discuss the concepts of schizophrenia and related psychotic disorders.
• Identify etiological implications in the development of these disorders.
• Describe various types of schizophrenia and related psychotic disorders.
• Identify symptomatology associated with these disorders and use this information in client assessment.
• Nursing process
Cont;

- Formulate nursing diagnoses and outcomes of care for clients with schizophrenia and other psychotic disorders.
- Identify topics for client and family teaching relevant to schizophrenia and other psychotic disorders.
- Describe appropriate nursing interventions for behaviors associated with these disorders.
- Describe relevant criteria for evaluating nursing care of clients with schizophrenia and related psychotic disorders.
- Discuss various modalities relevant to treatment of schizophrenia and related psychotic disorders.
Schizophrenia

- Schizophrenia is responsible for suffering in society because:
  - schizophrenia probably causes more lengthy hospitalizations
  - more chaos in family life
  - more exorbitant costs to individuals and governments
  - and more fears than any other.

- Potential for suicide is a major concern among patients with schizophrenia.

- Approximately 10 percent of patients with schizophrenia die by suicide.

- Other studies estimate evidence of suicidal ideation in individuals with schizophrenia to be in the range of 40 to 55 percent and attempted suicide to be in the range of 20 to 50 percent (Addington, 2006).
Cont;

• Schizophrenia causes disturbances in thought processes, perception, and affect invariably result in a severe deterioration of social and occupational functioning.
• Symptoms generally appear in late adolescence or early adulthood, although they may occur in middle or late adult life.
• Some studies have indicated that symptoms occur earlier in men than in women.
Cont;

- Positive symptom: (known by their presence)
  - delusions, hallucinations, abnormal movements, or thought disorders.

- Negative symptom: (characterized by absence)
  - social withdrawal, lack of affect, and reduced motivation.
Phases of Symptoms Development

• **Phase I: The Schizoid Personality.**
• The *DSM-IV-TR* (APA, 2000) describes individuals in this phase as
  • indifferent to social relationships
  • having a very limited range of emotional experience and expression.
  • They do not enjoy close relationships
  • Prefer to be “loners.”
  • They appear cold and aloof.
• Not all individuals who demonstrate the characteristics of schizoid personality will progress to schizophrenia.
• However, many individuals with schizophrenia show evidence of having had these characteristics in the premorbid condition.
Phase II: The Prodromal Phase.
Characteristics of this phase include

- social withdrawal
- impairment in role functioning
- behavior that is peculiar or eccentric
- neglect of personal hygiene and grooming
- blunted or inappropriate affect
- disturbances in communication
- bizarre ideas
- unusual perceptual experiences
- and lack of initiative, interests, or energy.

The length of this phase is highly variable, and may last for many years before deteriorating to the schizophrenic state.
• **Phase III: Schizophrenia.** In the active phase of the disorder, psychotic symptoms are prominent.

• Following are the *DSM-IV-TR* (APA, 2000) diagnostic criteria for schizophrenia:

• **Characteristic Symptoms:** Two (or more) of the following, each present for a significant portion of time during a 1-month period (or less if successfully treated):
  
  • Delusions
  • Hallucinations
  • Disorganized speech (e.g., frequent derailment or incoherence)
  • Grossly disorganized or catatonic behavior
  • Negative symptoms (i.e., affective flattening, alogia, or avolition)
Cont; characteristics of the third phase

- **Social/Occupational Dysfunction:** For a significant portion of the time since the onset of the disturbance, one or more major areas of functioning—such as work, interpersonal relationships, or self-care—are markedly below the level achieved before the onset (or when the onset is in childhood or adolescence, failure to achieve expected level of interpersonal, academic, or occupational achievement).

- **Duration:** Continuous signs of the disturbance persist for at least 6 months.
  - This 6-month period must include at least 1 month of symptoms (or less if successfully treated) that meet criterion 1 (i.e., active-phase symptoms)
  - may include periods of prodromal or residual symptoms.
  - During these prodromal or residual periods, the signs of the disturbance may be manifested by only negative symptoms or two or more symptoms listed in criterion 1 present in an attenuated form (e.g., odd beliefs, unusual perceptual experiences).
Phase IV: Residual Phase. Schizophrenia is characterized by:
- periods of remission and exacerbation.
- A residual phase usually follows an active phase of the illness.
- Symptoms during the residual phase are similar to those of the prodromal phase, with flat affect and impairment in role functioning being prominent.
- Residual impairment often increases between episodes of active psychosis.
Prognosis

- A return to full premorbid functioning is not common
- However, several factors have been associated with a more positive prognosis:
  - good premorbid adjustment
  - later age at onset
  - Female gender
  - abrupt onset of symptoms precipitated by a stressful event (as opposed to gradual insidious onset of symptoms)
  - associated mood disturbance
  - brief duration of active-phase symptoms
  - good interepisode functioning
  - minimal residual symptoms
  - absence of structural brain abnormalities
  - normal neurological functioning
  - a family history of mood disorder, and no family history of schizophrenia (APA, 2000).
ETIOLOGICAL IMPLICATIONS

• Many psychiatric disorders are multifactorial (caused by the interaction of external and genetic factors) and from the genetic point of view very often polygenically determined.
Genetics

• Studies show that relatives of individuals with schizophrenia have a much higher probability of developing the disease than does the general population.

• Whereas the lifetime risk for developing schizophrenia is about 1 percent in most population studies, the siblings or offspring of an identified client have a 5 to 10 percent risk of developing schizophrenia (Ho, Black & Andreasen, 2003).
Twin Studies

• The rate of schizophrenia among monozygotic (identical) twins is four times that of dizygotic (fraternal) twins and approximately 50 times that of the general population (Sadock & Sadock, 2003).
• Identical twins reared apart have the same rate of development of the illness as do those reared together.
• Because in about half of the cases only one of a pair of monozygotic twins develops schizophrenia, some investigators believe environmental factors interact with genetic ones.
Adoption Studies

- It was found that the children who were born of schizophrenic mothers were more likely to develop the illness than the comparison control groups (Ho, Black, & Andreasen, 2003).
- Studies also indicate that children born of nonschizophrenic parents, but reared by schizophrenic parents, do not seem to suffer more often from schizophrenia than general controls.
Biochemical Influences

• **The Dopamine Hypothesis**
• schizophrenia (or schizophrenia-like symptoms) may be caused by an excess of dopamine-dependent neuronal activity in the brain.
• The neuroleptics (e.g., chlorpromazine and haloperidol) lower brain levels of dopamine by blocking dopamine receptors, thus reducing the schizophrenic symptoms, including those induced by amphetamines.
Cont;

- Postmortem studies of schizophrenic brains have reported a significant increase in the average number of dopamine receptors in approximately two thirds of the brains studied.
Physiological Influences

• Viral infection:
  • high incidence of schizophrenia after prenatal exposure to influenza.
  • an association has been found between viral infections of the central nervous system during childhood and adult-onset schizophrenia.
Cont;

Anatomical Abnormalities

• structural brain abnormalities have been observed in individuals with schizophrenia.
• Ventricular enlargement and the sulci enlargement and cerebellar atrophy are also reported.
• possible decrease in cerebral and intracranial size in clients with schizophrenia.
• Studies have also revealed a decrease in frontal lobe size, but this has been less consistently replicated.
Histological Changes

• A “disordering” or disarray of the pyramidal cells in the area of the hippocampus has been suggested.
• This disarray of cells has been compared to the normal alignment of the cells in the brains of clients without the disorder.
• Some researchers have hypothesized that this alteration in hippocampal cells occurs during the second trimester of pregnancy and may be related to an influenza virus encountered by the mother during this period.
• Further research is required to determine the possible link between this birth defect and the development of schizophrenia.
Physical Conditions

- Some studies have reported a link between schizophrenia and epilepsy (particularly temporal lobe)
- Huntington’s disease
- birth trauma
- head injury in adulthood
- alcohol abuse
- cerebral tumor (particularly in the limbic system)
- cerebrovascular accidents
- Systemic lupus erythematosus
- myxedema
- parkinsonism,
- and Wilson’s disease.
Psychological Influences

- Early conceptualizations of schizophrenia focused on family relationship factors as major influences in the development of the illness.
- These early theories related to poor parent–child relationships and dysfunctional family systems as the cause of schizophrenia.
Environmental Influences

- Sociocultural Factors
- Stressful Life Events
Disorganized Schizophrenia

- This type previously was called *hebephrenic schizophrenia*.
- Onset of symptoms is usually before age 25, and the course is commonly chronic.
- Behavior is markedly regressive and primitive.
- Contact with reality is extremely poor.
- Affect is flat or grossly inappropriate, often with periods of silliness and incongruous giggling.
- Facial grimaces and bizarre mannerisms (Exaggerated or affected style or habit, as in dress or speech) are common, and communication is consistently incoherent.
- Personal appearance is generally neglected, and social impairment is extreme.
• **Catatonic Schizophrenia:** characterized by marked abnormalities in motor behavior and may be manifested by: *stupor* or *excitement*.

• **Catatonic stupor** is characterized by extreme psychomotor retardation.
  - The individual exhibits a pronounced decrease in spontaneous movements and activity. Mutism (i.e., absence of speech) is common, and negativism (i.e., an apparently motiveless resistance to all instructions or attempts to be moved) may be evident.
  - **Waxy flexibility:** a type of “posturing,” or voluntary assumption of bizarre positions, in which the individual may remain for long periods. Efforts to move the individual may be met with rigid bodily resistance.
• Catatonic excitement: a state of extreme psychomotor agitation.
  • The movements are purposeless, and are usually accompanied by continuous incoherent verbalizations and shouting.
  • Clients in catatonic excitement urgently require physical and medical control because they are often destructive and violent to others, and their excitement may cause them to injure themselves or to collapse from complete exhaustion.
  • Catatonic schizophrenia was quite common before the advent of antipsychotic medications for use in psychiatry. The illness is now rare in Europe and North America.
Paranoid Schizophrenia

• characterized mainly by the presence of delusions of persecution or grandeur and auditory hallucinations related to a single theme.
• The individual is often tense, suspicious, and guarded, and may be argumentative, hostile, and aggressive.
• Onset of symptoms is usually later (perhaps in the late 20s or 30s), and less regression of mental faculties, emotional response, and behavior is seen than in the other subtypes of schizophrenia.
• Social impairment may be minimal, and there is some evidence that prognosis, particularly with regard to occupational functioning and capacity for independent living, is promising.
Undifferentiated Schizophrenia

- Sometimes clients with schizophrenic symptoms do not meet the criteria for any of the subtypes, or they may meet the criteria for more than one subtype.
- These individuals may be given the diagnosis of undifferentiated schizophrenia.
- The behavior is clearly psychotic: there is evidence of delusions, hallucinations, incoherence, and bizarre behavior.
- However, the symptoms cannot be easily classified into any of the previously listed diagnostic categories.
Residual Schizophrenia

• This diagnostic category is used when the individual has a history of at least one previous episode of schizophrenia with prominent psychotic symptoms.

• Residual schizophrenia occurs in an individual who has a chronic form of the disease and is the stage that follows an acute episode (prominent delusions, hallucinations, incoherence, bizarre behavior, and violence).

• In the residual stage, there is continuing evidence of the illness, although there are no prominent psychotic symptoms.

• Residual symptoms may include social isolation, eccentric behavior, impairment in personal hygiene and grooming, blunted or inappropriate affect, poverty of or overly elaborate speech, illogical thinking, or apathy.
Schizoaffective Disorder

- manifested by schizophrenic behaviors, with a strong element of symptomatology associated with the mood disorders (depression or mania).
- The client may appear depressed, with psychomotor retardation and suicidal ideation, or symptoms may include euphoria, grandiosity, and hyperactivity.
- The decisive factor in the diagnosis of schizoaffective disorder is the presence of characteristic schizophrenic symptoms.
- For example, in addition to the dysfunctional mood, the individual exhibits bizarre delusions, prominent hallucinations, incoherent speech, catatonic behavior, or blunted or inappropriate affect.
- The prognosis for schizoaffective disorder is generally better than that for other schizophrenic disorders but worse than that for mood disorders alone.
Brief Psychotic Disorder

• The essential feature of this disorder is the sudden onset of psychotic symptoms that may or may not be preceded by a severe psychosocial stressor.
• These symptoms last at least 1 day but less than 1 month, and there is an eventual full return to the premorbid level of functioning.
• The individual experiences emotional turmoil or overwhelming perplexity or confusion.
• Evidence of impaired reality testing may include incoherent speech, delusions, hallucinations, bizarre behavior, and disorientation. Individuals with preexisting personality disorders (most commonly, histrionic, narcissistic, paranoid, schizotypal, and borderline personality disorders) appear to be susceptible to this disorder.
Schizophreniform Disorder

• The essential features of this disorder are identical to those of schizophrenia, with the exception that the duration, including prodromal, active, and residual phases, is at least 1 month but less than 6 months.
• If the diagnosis is made while the individual is still symptomatic but has been so for less than 6 months, it is qualified as “provisional.”
• The diagnosis is changed to schizophrenia if the clinical picture persists beyond 6 months.
• Schizophreniform disorder is thought to have a good prognosis if the individual’s affect is not blunted or flat, if there is a rapid onset of psychotic symptoms from the time the unusual behavior is noticed, or if the premorbid social and occupational functioning was satisfactory.
Delusional Disorder

• The essential feature of this disorder is the presence of one or more non-bizarre delusions that persist for at least 1 month.
  • **Erotomanic Type:** With this type of delusion, the individual believes that someone, usually of a higher status, is in love with him or her.
  • Sometimes the delusion is kept secret, but some individuals may follow, contact, or otherwise try to pursue the object of their delusion.
• **Grandiose Type:** Individuals with grandiose delusions have irrational ideas regarding their own worth, talent, knowledge, or power.

• They may believe that they have a special relationship with a famous person, or even assume the identity of a famous person (believing that the actual person is an imposter). Grandiose delusions of a religious nature may lead to assumption of the identity of a deity or religious leader.
• **Jealous Type:** The content of a jealous delusion centers on the idea that the person’s sexual partner is unfaithful.
• The idea is irrational and without cause, but the deluded individual searches for evidence to justify the belief.
• The sexual partner is confronted (and sometimes physically attacked) regarding the imagined infidelity.
• The imagined “lover” of the sexual partner may also be the object of the attack.
• Attempts to restrict the autonomy of the sexual partner in an effort to stop the imagined infidelity are common.
Cont;

- **Persecutory Type:** the most common type, individuals believe they are being malevolently treated in some way.
- Frequent themes include being conspired against, cheated, spied on, followed, poisoned or drugged, maliciously maligned, harassed, or obstructed in the pursuit of long-term goals.
- The individual may obsess about and exaggerate a slight rebuff (either real or imagined) until it becomes the focus of a delusional system.
- Repeated complaints may be directed at legal authorities, lack of satisfaction from which may result in violence toward the object of the delusion.
• **Somatic Type:** Individuals believe they have some physical defect, disorder, or disease.
• The *DSM IV- TR* identifies the most common types of somatic delusions as those in which the individual believes that he or she:
  • Emits a foul odor from the skin, mouth, rectum, or vagina.
  • Has an infestation of insects in or on the skin.
  • Has an internal parasite.
  • Has misshapen and ugly body parts.
  • Has dysfunctional body parts.
Shared Psychotic Disorder

• The essential feature of this disorder is a delusional system that develops in a second person as a result of a close relationship with another person who already has a psychotic disorder with prominent delusions.

• The course is usually chronic, and is more common in women than in men.
Psychotic Disorder Due to a General Medical Condition

- The essential features of this disorder are prominent hallucinations and delusions that can be directly attributed to a general medical condition.
- The diagnosis is not made if the symptoms occur during the course of a delirium or chronic, progressing dementia.
- A number of medical conditions can cause psychotic symptoms. Common ones are presented in Table 15–1.
Substance-Induced Psychotic Disorder

• The essential features of this disorder are the presence of prominent hallucinations and delusions that are judged to be directly attributable to the physiological effects of a substance (i.e., a drug of abuse, a medication, or toxin exposure).
• The diagnosis is made in the absence of reality testing and when history, physical examination, or laboratory findings indicate use of substances.
• When reality testing has been retained in the presence of substance-induced psychotic symptoms, the diagnosis would be substance-related disorder.
• Substances that are believed to induce psychotic disorders are presented in Table 15–2.
Nursing Process
Assessment

• Clients in an acute episode of their illness are seldom able to make a significant contribution to their history.
• Data may be obtained from family members, if possible; from old records, if available; or from other individuals who have been in a position to report on the progression of the client’s behavior.
• behavioral disturbances in eight areas of functioning:
  • content of thought,
  • form of thought,
  • perception,
  • affect,
  • sense of self,
  • volition,
  • impaired interpersonal functioning and relationship to the external world,
  • and psychomotor behavior.
Assessment

• **Content of Thought**
  • **DELUSIONS.** Delusions are false personal beliefs that are inconsistent with the person’s intelligence or cultural background. The individual continues to have the belief in spite of obvious proof that it is false or irrational. Delusions are subdivided according to their content.
Delusion

- **Delusion of Persecution**: The individual feels threatened and believes that others intend harm or persecution toward him or her in some way (e.g., “The FBI has ‘bugged’ my room and intends to kill me.” “I can’t take a shower in this bathroom; the nurses have put a camera in there so that they can watch everything I do”).

- **Delusion of Grandeur**: The individual has an exaggerated feeling of importance, power, knowledge, or identity (e.g., “I am Jesus Christ”).

- **Delusion of Reference**: All events within the environment are referred by the psychotic person to himself or herself (e.g., “Someone is trying to get a message to me through the articles in this magazine [or newspaper or TV program]; I must break the code so that I can receive the message”). *Ideas of reference* are less rigid than delusions of reference. An example of an idea of reference is irrationally thinking that one is being talked about or laughed at by other people.

- **Delusion of Control or Influence**: The individual believes certain objects or persons have control over his or her behavior (e.g., “The dentist put a filling in my tooth; I now receive transmissions through the filling that control what I think and do”).
Delusion

- **Somatic Delusion**: The individual has a false idea about the functioning of his or her body (e.g., “I’m 70 years old and I will be the oldest person ever to give birth. The doctor says I’m not pregnant, but I know I am”).

- **Nihilistic Delusion**: The individual has a false idea that the self, a part of the self, others, or the world is nonexistent (e.g., “The world no longer exists.” “I have no heart.”).
• **RELIGIOSITY**: an excessive demonstration of or obsession with religious ideas and behavior.
  • Because individuals vary greatly in their religious beliefs and level of spiritual commitment, religiosity is often difficult to assess.
  • The individual with schizophrenia may use religious ideas in an attempt to provide rational meaning and structure to his or her behavior.
  • Religious preoccupation in this vein may therefore be considered a manifestation of the illness.
  • However, clients who derive comfort from their religious beliefs should not be discouraged from employing this means of support.
  • An example of religiosity is the individual who believes the voice he or she hears is God and incessantly searches the Bible for interpretation.

• **PARANOIA.** Individuals with paranoia have extreme suspiciousness of others and of their actions or perceived intentions (e.g., “I won’t eat this food. I know it has been poisoned.”).

• **MAGICAL THINKING**: the person believes that his or her thoughts or behaviors have control over specific situations or people (e.g., the mother who believed if she scolded her son in any way he would be taken away from her). Magical thinking is common in children (e.g., “Step on a crack and you break your mother’s back.” “An apple a day keeps the doctor away”).
Form of thought

- **ASSOCIATIVE LOOSENESS.** Thinking is characterized by speech in which ideas shift from one unrelated subject to another. With *associative looseness*, the individual is unaware that the topics are unconnected. When the condition is severe, speech may be incoherent. (For example, “We wanted to take the bus, but the airport took all the traffic. Driving is the ticket when you want to get somewhere. No one needs a ticket to heaven. We have it all in our pockets.”)

- **NEOLOGISMS.** The psychotic person invents new words, or *neologisms*, that are meaningless to others but have symbolic meaning to the psychotic person (e.g., “She wanted to give me a ride in her new uniphorum”).

- **CONCRETE THINKING.** Concreteness, or literal interpretations of the environment, represents a regression to an earlier level of cognitive development. For example, the client with schizophrenia would have great difficulty describing the abstract meaning of sayings such as “I’m climbing the walls,” or “It’s raining cats and dogs.”
Form of thought

• **CLANG ASSOCIATIONS.** Choice of words is governed by sounds. Clang associations often take the form of rhyming. For instance “It is very cold. I am cold and bold. The gold has been sold.”

• **WORD SALAD.** A word salad is a group of words that are put together randomly, without any logical connection (e.g., “Most forward action grows life double plays circle uniform”).

• **CIRCUMSTANTIALITY:** the individual is delayed in reaching the point of a communication because of unnecessary and tedious details. The point or goal is usually met but only with numerous interruptions by the interviewer to keep the person on track of the topic being discussed.

• **TANGENTIALITY:** differs from circumstantiality in that the person never really gets to the point of the communication. Unrelated topics are introduced, and the original discussion is lost.

• **MUTISM.** This is an individual’s inability or refusal to speak.

• **PERSEVERATION.** The individual persistently repeats the same word or idea in response to different questions.
Perception

- **HALLUCINATIONS**: false sensory perceptions not associated with real external stimuli, may involve any of the five senses. Types of hallucinations include the following:
  - **Auditory**: are false perceptions of sound. Most commonly they are of voices, but the individual may report clicks, rushing noises, music, and other noises. Command hallucinations may place the individual or others in a potentially dangerous situation. “Voices” that issue commands for violence to self or others may or may not be heeded by the psychotic person. Auditory hallucinations are the most common type in psychiatric disorders.
  - **Visual**: These are false visual perceptions. They may consist of formed images, such as of people, or of unformed images, such as flashes of light.
  - **Tactile**: Tactile hallucinations are false perceptions of the sense of touch, often of something on or under the skin. One specific tactile hallucination is formication, the sensation that something is crawling on or under the skin.
Gustatory: This type is a false perception of taste. Most commonly, gustator hallucinations are described as unpleasant tastes.

Olfactory: Olfactory hallucinations are false perceptions of the sense of smell.
Form of thought

• **ILLUSIONS.** are mis-perceptions of mis-interpretations of real external stimuli.
Affect

- Affect describes the behavior associated with an individual’s feeling state or emotional tone.
  - **INAPPROPRIATE AFFECT.** Affect is inappropriate when the individual’s emotional tone is incongruent with the circumstances (e.g., a young woman who laughs when told of the death of her mother).
  - **BLAND OR FLAT AFFECT.** Affect is described as bland when the emotional tone is very weak. The individual with flat affect appears to be void of emotional tone (or overt expression of feelings).
  - **APATHY.** The client with schizophrenia often demonstrates an indifference to or disinterest in the environment. The bland or flat affect is a manifestation of the emotional apathy.
Sense of Self

• describes the uniqueness and individuality a person feels. Because of extremely weak ego boundaries, the individual with schizophrenia lacks this feeling of uniqueness and experiences a great deal of confusion regarding his or her identity.
  
  • ECHOLALIA. The client with schizophrenia may repeat words that he or she hears. This is an attempt to identify with the person speaking. (For instance, the nurse says, “John, it’s time for lunch.” The client may respond, “It’s time for lunch, it’s time for lunch” or sometimes, “Lunch, lunch, lunch, lunch”).
  
  • ECHOPRAXIA. The client may purposelessly imitate movements made by others.
  
  • IDENTIFICATION AND IMITATION. Identification, which occurs on an unconscious level, and imitation, which occurs on a conscious level, are ego defense mechanisms used by individuals with schizophrenia and reflect their confusion regarding self-identity. Because they have difficulty knowing where their ego boundaries end and another person’s begins, their behavior often takes on the form of that which they see in the other person.
Sense of Self

• **DEPERSONALIZATION.** The unstable self-identity of an individual with schizophrenia may lead to feelings of unreality (e.g., feeling that one’s extremities have changed in size; or a sense of seeing oneself from a distance).
Volition

• impairment in the ability to initiate goal-directed activity.
• **EMOTIONAL AMBIVALENCE.** Ambivalence in the client with schizophrenia refers to the coexistence of opposite emotions toward the same object, person, or situation.
Impaired Interpersonal Functioning and Relationship to the External World

- Some clients with acute schizophrenia cling to others and intrude on the personal space of others, exhibiting behaviors that are not socially and culturally acceptable.
- Impairment in social functioning may also be reflected in social isolation, emotional detachment, and lack of regard for social convention.
- **AUTISM:** describes the condition created by the person with schizophrenia who focuses inward on a fantasy world while distorting or excluding the external environment.
- **DETERIORATED APPEARANCE.** Personal grooming and self-care activities may become minimal. The client with schizophrenia may appear disheveled and untidy and may need to be reminded of the need for personal hygiene.
Psychomotor Behavior

• **ANERGIA**: is a deficiency of energy. The individual with schizophrenia may lack sufficient energy to carry out activities of daily living or to interact with others.

• **WAXY FLEXIBILITY**: describes a condition in which the client with schizophrenia allows body parts to be placed in bizarre or uncomfortable positions. Once placed in position, the arm, leg, or head remains in that position for long periods, regardless of how uncomfortable it is for the client. For example, the nurse may position the client’s arm in an outward position to take a blood pressure measurement. When the cuff is removed, the client may maintain the arm in the position it was placed to take the reading.
Psychomotor Behavior

- **POSTURING.** This symptom is manifested by the voluntary assumption of inappropriate or bizarre postures.
- **PACING AND ROCKING.** Pacing back and forth and body rocking (a slow, rhythmic, backward-and-forward swaying of the trunk from the hips, usually while sitting) are common psychomotor behaviors of the client with schizophrenia.
Associated Features

- **ANHEDONIA**: is the inability to experience pleasure. This is a particularly distressing symptom that compels some clients to attempt suicide.

- **REGRESSION**: is the retreat to an earlier level of development. Regression, a primary defense mechanism of schizophrenia, is a dysfunctional attempt to reduce anxiety. It provides the basis for many of the behaviors associated with schizophrenia.
Positive symptoms tend to reflect an excess or distortion of normal functions.

- negative symptoms reflect a diminution or loss of normal functions.

- Most clients exhibit a mixture of both types of symptoms. Positive symptoms are associated with normal brain structures on CT scan and relatively good responses to treatment. Individuals who exhibit mostly negative symptoms often show structural brain abnormalities on CT scans and respond poorly to treatment. Examples of positive and negative symptoms are presented in Box 15–1.
Diagnosis/Outcome Identification

• Possible nursing diagnoses for clients with psychotic disorders include:
  • Disturbed sensory perception:
  • Disturbed thought processes
  • Social isolation
  • Risk for violence:
  • Impaired verbal communication
  • Self-care deficit
  • Disabled family coping:
  • Ineffective health maintenance
  • Impaired home-maintenance management
Outcome

• *The client:*
• Demonstrates an ability to relate satisfactorily with others.
• Recognizes distortions of reality.
• Has not harmed self or others.
• Perceives self realistically.
• Demonstrates the ability to perceive the environment correctly.
• Maintains anxiety at a manageable level.
• Relinquishes the need for delusions and hallucinations.
• Demonstrates the ability to trust others.
• Uses appropriate verbal communication in interactions with others.
• Performs self-care activities independently.
Planning/Implementation

- Table 15–3 provides a plan of care for the client with schizophrenia.
### Table 15-3 Care Plan for the Client with Schizophrenia

**Nursing Diagnosis:** Disturbed Sensory Perception: Auditory/Visual

**Related To:** Panic anxiety, extreme loneliness and withdrawal into the self

**Evidenced By:** Inappropriate responses, disordered thought sequencing, rapid mood swings, poor concentration, disorientation.

<table>
<thead>
<tr>
<th>Outcome Criteria</th>
<th>Nursing Interventions</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client will be able to define and test reality, reducing or eliminating the</td>
<td>1. Observe client for signs of hallucinations (listening pose, laughing or talking</td>
<td>1. Early intervention may prevent aggressive response to command hallucinations.</td>
</tr>
<tr>
<td>occurrence of hallucinations.</td>
<td>to self, stopping in midsentence).</td>
<td>2. Client may perceive touch as threatening and may respond in a defensive or aggressive manner.</td>
</tr>
<tr>
<td></td>
<td>2. Avoid touching the client without warning.</td>
<td>3. This is important to prevent possible injury to the client or others from command hallucinations.</td>
</tr>
<tr>
<td></td>
<td>3. An attitude of acceptance will encourage the client to share the content of the</td>
<td>4. Client must accept the perception as unreal before hallucinations can be eliminated.</td>
</tr>
<tr>
<td></td>
<td>hallucination with you.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Do not reinforce the hallucination. Use “the voices” instead of words like “they”</td>
<td></td>
</tr>
<tr>
<td></td>
<td>that imply validation. Let client know that you do not share the perception. Say,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>“Even though I realize the voices are real to you, I do not hear any voices.”</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Help the client understand the connection between anxiety and hallucinations.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. Try to distract the client from the hallucination.</td>
<td>5. If client can learn to interrupt escalating anxiety, hallucinations may be prevented.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. Involvement in interpersonal activities and explanation of the actual situation will help bring the client back to reality.</td>
<td></td>
</tr>
</tbody>
</table>
**NURSING DIAGNOSIS:** RISK FOR VIOLENCE: SELF-DIRECTED OR OTHER-DIRECTED

**RELATED TO:** Extreme suspiciousness, panic anxiety, catatonic excitement, rage reactions, command hallucinations

**EVIDENCED BY:** Overt and aggressive acts, goal-directed destruction of objects in the environment, self-destructive behavior or active aggressive suicidal acts.

<table>
<thead>
<tr>
<th>Outcome Criteria</th>
<th>Nursing Interventions</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client will not harm self or others.</td>
<td>1. Maintain low level of stimuli in client’s environment (low lighting, few people, simple decor, low noise level).&lt;br&gt;2. Observe client’s behavior frequently. Do this while carrying out routine activities.&lt;br&gt;3. Remove all dangerous objects from client’s environment.&lt;br&gt;4. Redirect violent behavior with physical outlets for the anxiety.&lt;br&gt;5. Staff should maintain a calm attitude toward client.&lt;br&gt;6. Have sufficient staff available to indicate a show of strength to client if it becomes necessary.&lt;br&gt;7. Administer tranquilizing medications as ordered by physician. If client is not calmed by “talking down” or by medication, use of mechanical restraints may be necessary.</td>
<td>1. Anxiety level rises in stimulating environment. Individuals may be perceived as threatening by a suspicious, agitated client.&lt;br&gt;2. Observation during routine activities avoids creating suspiciousness on the part of the client. Close observation is necessary so that intervention can occur if required to ensure client (and others’) safety.&lt;br&gt;3. Removal of dangerous objects prevents client, in an agitated, confused state, from harming self or others.&lt;br&gt;4. Physical exercise is a safe and effective way of relieving pent-up tension.&lt;br&gt;5. Anxiety is contagious and can be transmitted from staff to client.&lt;br&gt;6. This shows the client evidence of control over the situation and provides some physical security for staff.&lt;br&gt;7. The avenue of the “least restrictive alternative” must be selected when planning interventions for a violent client. Restraints should be used only as a last resort, after all other interventions have been unsuccessful, and the client is clearly at risk of harm to self or others.</td>
</tr>
</tbody>
</table>
Client/Family Education

• The role of client teacher is important in the psychiatric area, as it is in all areas of nursing. A list of topics for client/family education relevant to schizophrenia is presented in Box 15–2.

• Examples:
  • Nature of the Illness
  • Management of the Illness
Evaluation

• Evaluation
• Is the anxiety level maintained at a manageable level?
• Is delusional thinking still prevalent?
• Is hallucinogenic activity evident? Does the client share content of hallucinations, particularly if commands are heard?
• Is the client able to interrupt escalating anxiety with adaptive coping mechanisms?
• Is the client easily agitated?
• Is the client able to interact with others appropriately?
TREATMENT MODALITIES FOR SCHIZOPHRENIA AND OTHER PSYCHOTIC DISORDERS

• Psychological Treatments
  • Individual Psychotherapy:
    • Reality-oriented individual therapy is the most suitable approach to individual psychotherapy for schizophrenia. The primary focus in all cases must reflect efforts to decrease anxiety and increase trust.
    • Once a therapeutic interpersonal relationship has been established, reality orientation is maintained through exploration of the client’s behavior within relationships.
    • Education is provided to help the client identify sources of real or perceived danger and ways of reacting appropriately.
    • Methods for improving interpersonal communication, emotional expression, and frustration tolerance are attempted.
Group Therapy

Group therapy with individuals with schizophrenia has been shown to be effective, particularly with outpatients and when combined with drug treatment.

Group therapy for people with schizophrenia generally focuses on real-life plans, problems, and relationships.

Group therapy is effective in reducing social isolation, increasing the sense of cohesiveness, and improving reality testing for patients with schizophrenia.
Group therapy

• Group therapy in inpatient settings is less productive.
• Inpatient treatment usually occurs when symptomatology and social disorganization are at their most intense.
• Group therapy for schizophrenia has been most useful over the long-term course of the illness.
• Social interaction, sense of cohesiveness, identification, and reality testing achieved within the group setting have proven to be highly therapeutic processes for these clients.
Behavior Therapy

• Behavior modification has a history of qualified success in reducing the frequency of bizarre, disturbing, and deviant behaviors and increasing appropriate behaviors.

• Features that have led to the most positive results include:
  • Clearly defining goals and how they will be measured.
  • Attaching positive, negative, and aversive reinforcements to adaptive and maladaptive behavior.
  • Using simple, concrete instructions and prompts to elicit the desired behavior.

• Behavior therapy can be a powerful treatment tool for helping clients change undesirable behaviors.

• In the treatment setting, the therapist can use praise and other positive reinforcements to help the client with schizophrenia reduce the frequency of maladaptive or deviant behaviors.

• A limitation of this type of treatment is the inability of some individuals with schizophrenia to generalize what they have learned to the community setting following discharge from therapy.
Social Skills Training

• The basic premise of social skills training is that complex interpersonal skills involve the smooth integration of a combination of simpler behaviors, including nonverbal behaviors (e.g., facial expression, eye contact); paralinguistic features (e.g., voice loudness and affect); verbal content (i.e., the appropriateness of what is said); and interactive balance (e.g., response latency, amount of time talking).

• These specific skills can be systematically taught, and, through the process of shaping (i.e., rewarding successive approximations toward the target behavior), complex behavioral repertoires can be acquired.
Social Treatment

• Milieu Therapy

• Family Therapy

• Assertive Community Treatment (ACT): is a program of case management that takes a team approach in providing comprehensive, community-based psychiatric treatment, rehabilitation, and support to persons with serious and persistent mental illness such as schizophrenia.

  • Aggressive programs of treatment are individually tailored for each client and include the teaching of basic living skills, helping clients work with community agencies, and assisting clients in developing a social support network
Organic Treatment

- **Psychopharmacology:**
- Chlorpromazine (Thorazine) was used in conjunction with barbiturates.
- Antipsychotic medications are very effective in treating the symptoms of schizophrenia.
- Unfortunately, substantiated evidence of long-term recovery with antipsychotic medications is notably lacking.
Psychopharmacology

• Common side effects are presented in Table 15–4.
• Antiparkinsonian agents may be prescribed to counteract the extrapyramidal symptoms associated with antipsychotic medications. These drugs are cholinergic blockers, producing the same anticholinergic side effects as the antipsychotic medications.
• It is extremely important for the nurse to be able to recognize the symptoms associated with extrapyramidal side effects so that he or she can administer the antiparkinsonian drug without delay.
<table>
<thead>
<tr>
<th>Classification</th>
<th>Generic (Trade) Name</th>
<th>Daily Dosage Range</th>
<th>Side Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Phenothiazines</strong></td>
<td>Chlorpromazine (Thorazine)</td>
<td>75–400</td>
<td>For all phenothiazines: Anticholinergic side effects, nausea, skin rash, sedation, orthostatic hypotension, tachycardia, photosensitivity, decreased libido, amenorrhea, retrograde ejaculation, gynecomastia, weight gain, reduction of seizure threshold, agranulocytosis, EPS, tardive dyskinesia, NMS</td>
</tr>
<tr>
<td></td>
<td>Fluphenazine (Prolixin)</td>
<td>2.5–10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Perphenazine (Trilafon)</td>
<td>12–64</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prochlorperazine (Compazine)</td>
<td>15–150</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Thoridazine (Mellaril)</td>
<td>150–800</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Trifluoperazine (Stelazine)</td>
<td>4–40</td>
<td></td>
</tr>
<tr>
<td><strong>Thioxanthenes</strong></td>
<td>Thiothixene (Navane)</td>
<td>6–30</td>
<td>Refer to side effects of phenothiazines</td>
</tr>
<tr>
<td><strong>Benzisoxazole</strong></td>
<td>Risperidone (Risperdal)</td>
<td>1–6</td>
<td>Anxiety, agitation, insomnia, sedation, EPS, dizziness, headache, constipation, nausea, rhinitis, rash, tachycardia, hyperglycemia</td>
</tr>
<tr>
<td></td>
<td>Paliperidone (Invega)</td>
<td>6–12</td>
<td></td>
</tr>
<tr>
<td><strong>Butyrophenone</strong></td>
<td>Haloperidol (Haldol)</td>
<td>1–100</td>
<td>Refer to side effects of phenothiazines</td>
</tr>
<tr>
<td><strong>Dibenzoxazepine</strong></td>
<td>Loxapine (Loxitane)</td>
<td>20–250</td>
<td>Refer to side effects of phenothiazines</td>
</tr>
<tr>
<td><strong>Dibydroindolone</strong></td>
<td>Molindone (Moban)</td>
<td>15–225</td>
<td>Refer to side effects of phenothiazines</td>
</tr>
<tr>
<td><strong>Dibenzodiazepine</strong></td>
<td>Clozapine (Clozaril)</td>
<td>300–900</td>
<td>Drowsiness, dizziness, agranulocytosis, seizures, sedation, hyper-salivation, tachycardia, constipation, fever, weight gain, orthostatic hypotension, NMS, hyperglycemia</td>
</tr>
<tr>
<td><strong>Thienobenzodiazepine</strong></td>
<td>Olanzapine (Zyprexa)</td>
<td>5–20</td>
<td>Asthenia, somnolence, headache, fever, dizziness, dry mouth, constipation, weight gain, orthostatic hypotension, tachycardia, EPS (high-dose dependent), hyperglycemia</td>
</tr>
<tr>
<td><strong>Dibenzothiazepine</strong></td>
<td>Quetiapine (Seroquel)</td>
<td>150–750</td>
<td>Somnolence, dizziness, headache, constipation, dry mouth, dyspepsia, weight gain, orthostatic hypotension, NMS, EPS, tardive dyskinesia, cataracts, lowered seizure threshold, hyperglycemia</td>
</tr>
<tr>
<td><strong>Benzothiazolylpiperazine</strong></td>
<td>Ziprasidone (Geodon)</td>
<td>40–160</td>
<td>Somnolence, headache, nausea, dyspepsia, constipation, dizziness, diarrhea, restlessness, EPS, prolonged QT interval, orthostatic hypotension, rash, hyperglycemia</td>
</tr>
<tr>
<td><strong>Dibydrocarbostyril</strong></td>
<td>Aripiprazole (Abilify)</td>
<td>10–30</td>
<td>Headache, nausea and vomiting, constipation, anxiety, restlessness, insomnia, lightheadedness, somnolence, weight gain, blurred vision, increased salivation, EPS, hyperglycemia</td>
</tr>
</tbody>
</table>

EPS = extrapyramidal symptoms; NMS = neuroleptic malignant syndrome.
Many physicians are choosing to prescribe the newer atypical antipsychotics (e.g., clozapine, risperidone, paliperidone, olanzapine quetiapine, ziprasidone, aripiprazole) that cause few, if any, extrapyramidal symptoms.
For those clients with schizophrenia who do not respond to antipsychotic medications, a number of other pharmacological options have been tried, with various degrees of success. Use of the following medication alternatives have been reported:
Cont;

- Reserpine, a dopamine receptor antagonist, has been used as an antihypertensive agent and as an antipsychotic. It has produced severe depression in humans and for this reason is now rarely used for either purpose.
- Lithium carbonate can ameliorate schizophrenic symptoms or suppress episodic violence in clients with schizophrenia but is seldom an adequate drug therapy alone.
- Carbamazepine ameliorates symptoms in some treatment-resistant psychotic clients, but it alone is not an adequate therapy for schizophrenia.
- Valium, in high dosages, has been shown to control psychotic symptoms of schizophrenia, such as agitation, thought disorder, delusions, and hallucinations. It has also been used to relieve akathisia associated with some antipsychotic medication. The best use of benzodiazepines appears to be as adjunct therapy with antipsychotic medication in the management of psychotic agitation.
- Propranolol may be useful in controlling temper outbursts in aggressive or violent psychotic clients.