chapter 7

Psychotherapeutic Drug Therapy

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Objectives

Upon completion of this text, the student will be able to:

1. Briefly explain how psychotherapeutic medications affect human beings.
2. Identify four classifications of psychotherapeutic medications.
3. Discuss three classes of antianxiety agents and the side effects associated with each.
4. Prepare a list of three teaching points for clients who are beginning antidepressant therapy.
5. Explain the three major guidelines for care of clients taking lithium.
6. Identify one central nervous system and three peripheral nervous system side effects of antipsychotic (neuroleptic) drug therapy.
7. Describe five care guidelines for clients receiving psychotherapeutic drugs.
8. Discuss three topics for teaching clients about their medications.
9. Explain how informed consent and noncompliance relate to psychotherapeutic medications.

Key Terms

affective (ă-FĔK-tĭv) **disorder** (p. 70)
akathisia (ĂK-ə-THĒ-zhə) (p. 73)
akinesia (Ă-kĭ-NĒ-zhə) (p. 73)
antipsychotics (ĂN-tī-sī-KŎT-ĭks) (p. 72)
autonomic nervous system (ŏ-tō-NŎM-ĭk NŬR-vŭs SĬS-tĕm) **(ANS)** (p. 67)
central (SĔN-trŭl) **nervous system (CNS)** (p. 67)
drug-induced parkinsonism (DRŬG-ĭn-doost PĂHR-kĭn-sə-nĭz-əm) (p. 73)
dyskinesia (DĬS-kĭ-NĒ-zhə) (p. 73)
dystonia (dĭs-TŌN-nē-ə) (p. 73)
extrapyramidal (ĔKS-tră-pĭ-RĂM-ĭ-dĂl) **side effects (EPSEs)** (p. 73)
hypertensive crisis (hī-pər-TĔN-sĭv CRĪ-sĭs) (p. 70)
informed consent (p. 76)
lithium (LĬTH-ē-əm) (p. 71)
mania (MĀ-nē-ə) (p. 71)
monoamine oxidase inhibitors (MŎN-ō-ă-MĒN ŎK-sĭ-dās ĭn-HĪB-ĭ-tərs) **(MAOIs)** (p. 70)
mood disorders (p. 70)
neuroleptic malignant syndrome (NOOR-ō-LĔP-tĭk mə-LĬG-nənt SĬN-drōm) **(NMS)** (p. 73)
neuron (NOOR-ŏn) (p. 68)
neurotransmitter (NOOR-ō-TRĂNS-mĭ-tər) (p. 68)
noncompliance (NŎN-cəm-PLĪ-əns) (p. 76)
parasympathetic (PAR-ə-SĬM-pə-THĔT-ĭk) **nervous system** (p. 67)
peripheral (pə-RƏF-ĕr-əl) **nervous system (PNS)** (p. 67)
psychotherapeutic (SĪ-kō-thĕr-ə-PYŪ-tĭk) **drugs** (p. 66)
sympathetic (SĬM-pə-THĔT-ĭk) **nervous system** (p. 67)
tardive dyskinesia (TĂR-dĭv DĬS-kĭ-NĒ-zhă) (p. 73)

Psychotherapeutic drugs are powerful chemicals that produce profound effects on the mind, emotions, and body (Keltner and Folks, 2005). They were first discovered as side effects of other drugs, such as antihistamines for allergies. In 1949, lithium was found to be effective in treating the mania of bipolar illness. The 1950s brought the use of chlorpromazine (Thorazine) into the therapeutic regimen. The tranquilizer meprobamate (Miltown) became so popular in 1955 that drugstores were "required to place signs in the window when they sell out" (Keltner, Bostrom, and McGuinness, 2011). By the early 1960s, tricyclic antidepressants, monoamine oxidase inhibitors (MAOIs), and haloperidol (Haldol) were on the market. The antianxiety drug diazepam (Valium) became extremely popular, and soon it was the most often prescribed medication in the world. Newer psychotherapeutic drugs have been introduced, and even more will be available in the future. According to IMS Health (2010), "antipsychotics remain the top-selling class of medications in the U.S., with 2009 prescription sales of $14.6 billion." Health care professionals who work with these drugs must remember that psychotherapeutic medications are powerful chemicals with many, sometimes severe, side effects.

HOW PSYCHOTHERAPEUTIC DRUG THERAPY WORKS

Psychiatric medications act on the body's nervous system by altering the delicate chemical balances within that system. Most psychotherapeutic medications

Get Ready for the NCLEX® Examination!

Key Points

- Allopathic practitioners use medical and surgical methods to treat disease and injury by finding what is "wrong" and "fixing" it.
- Complementary medicine includes practices and treatments that agree or "work with" allopathic therapies. They are used along with common medical treatments.
- Alternative medicine refers to practices and treatments that are used instead of conventional (allopathic) medicine.
- Integrative medicine attempts to blend the most effective *practices* and treatments from both conventional and alternative treatment systems.
- The primary goal of holistic mental health care providers is to help clients develop strategies to achieve harmony within themselves and with others, nature, and the world.
- The National Center for Complementary and Alternative Medicine (NCCAM), a part of the U.S. National Institutes of Health, is dedicated to exploring complementary and alternative healing practices.
- Whole medical systems are built on complete systems of theory and practice and include Western medicine, osteopathy, homeopathy, naturopathy, and culturally based systems.
- Biologically based practices use substances extracted from nature. Treatments include aromatherapy, dietary supplements, and herbal therapies.
- Body-based practices focus on moving the body into an improved state of function through treatment. They include chiropractic treatment, chelation, eye movement desensitization, massage, and phototherapy.
- Energy-based therapies base their practices upon two types of energy fields: the veritable and the putative.
- Followers of mind-body medicine believe that the mind and spirit can affect the body and its functions.
- Mind-body therapies include expressive therapies, such as music or dance, hypnotherapy, meditation, prayer, and spiritual healing.
- Practitioners of energy medicine believe in a vital, life-force energy that flows through the human body.
- Energy medicine is divided into two areas: biofield therapies and bioelectromagnetic field therapies.
- Examples of biofield therapies are acupuncture, biofeedback, Qi Gong, Reiki, therapeutic touch, and color therapy.
- Current bioelectromagnetic field theories operate on the theory that energy can treat illness.
- Magnetic therapy, repetitive transcranial magnetic stimulation (TMS), pulsating electromagnetic therapy, and millimeter wave therapy are bioelectromagnetic applications of the theory.
- Technology-based approaches to mental health care include telemedicine, telephone counseling, and radio psychiatry.
- The use of CAM therapies to treat mental health problems must be approached with caution because some CAM therapies may have adverse or unwanted effects.

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Review Questions for the NCLEX® Examination

1. A male client, home from military combat duty, is given the diagnosis of posttraumatic stress disorder (PTSD) and is unable to discuss previous painful experiences and emotions. Which mind-body–based therapy could help to decrease his stress and emotional pain?
   1. Massage
   2. Phototherapy
   3. Eye movement desensitization
   4. Hypnosis

2. Which of the following best describes an allopathic method of treatment for a client with a diagnosis of generalized anxiety disorder?
   1. Massage therapy for relaxation
   2. Herb and dietary supplements that promote relaxation
   3. Antianxiety medications to decrease anxiety levels
   4. Incorporation of body, mind, and spirit to decrease anxiety levels

3. A 10-year-old male client with autism experiences loneliness and social anxiety as a result of his disease. Which CAM therapy will the nurse suggest to help this client most with these feelings?
   1. Yoga
   2. Acupuncture
   3. Music and dance therapy
   4. Animal-assisted therapy

4. Which of the following individuals would most likely benefit from joining a self-help group?
   1. 32-year-old female rape victim
   2. 25-year-old male experiencing paranoid schizophrenia
   3. 16-year-old male in detox for crack addiction
   4. 8-year-old female with autism

5. Clients with attention-deficit/hyperactivity disorder have been found to respond well to therapy in which they are taught to use signals from special equipment that monitors body functions, such as respiratory and pulse rates, to control their own responses. What is this therapy called?
   1. Qi Gong
   2. Reiki
   3. Biofeedback
   4. Acupuncture

interrupt the chemical messenger (neurotransmitter) pathways within the brain by suppressing major nerve pathways that connect the deeper brain to the frontal lobes and limbic system.

The frontal lobes of the brain are the source of the higher human functions, such as love, creativity, insight, planning, judgment, and abstract reasoning. The limbic system is responsible for emotions, motivation, memory, and the fight-or-flight response. When these areas of the brain are affected by medications, profound changes in behavior result. People usually experience more stable moods, but **many higher brain functions are impaired.** As with all medications, there is a trade-off between therapeutic effects and unwanted reactions. One of the primary responsibilities of health care providers (especially nurses) is to recognize therapeutic versus unwanted effects.

The human nervous system consists of an intricate network of structures that activates, coordinates, and controls all of the functions of the body. All parts of the nervous system work together. It is important to remember that if a drug affects one part of the nervous system, it will, without a doubt, have an impact on the other activities of the system. Figure 7-1 illustrates the divisions of the nervous system.

The **central nervous system (CNS)** is composed of the brain and spinal cord. Together they control all the motor and sensory functions of the body. Information travels from the brain *down* through the spinal cord, reaches the appropriate muscle group, and results in movement. Sensory information (e.g., touch, temperature, position) is relayed in the opposite direction: from the muscles and other body areas *up* through the spinal cord and into the brain. Throughout this process, the CNS combines all incoming (sensory) and outgoing (motor) data.

The **peripheral nervous system (PNS)** is composed of the 31 spinal cord nerves plus the 12 pairs of cranial nerves. The peripheral nervous system is further divided into a "motor" system and an "autonomic" (automatic) system. Each spinal nerve contains motor and sensory neurons (nerve cells). The motor portion of the spinal nerve activates heart, muscles, and glandular secretions, whereas sensations of touch, temperature, pain, and spatial perception are transmitted by the sensory portion. The cranial nerves carry a mixture of information; some nerves are mainly motor, others carry mainly sensory information, and a few perform both motor and sensory functions.

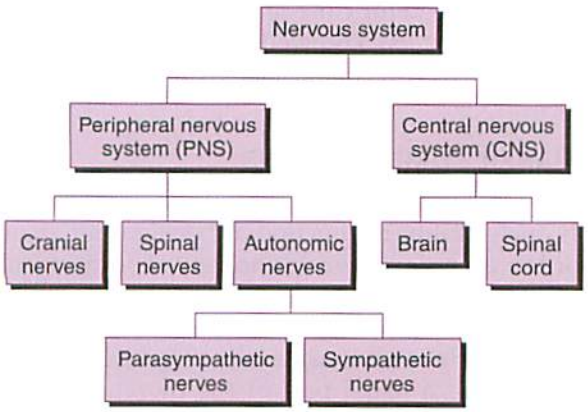

FIGURE 7-1 Divisions of the nervous system.

The **autonomic nervous system (ANS)** is responsible for regulating the vital functions of the body. The activities of the heart muscle, smooth muscles, and glandular secretions are all controlled "automatically" by this remarkable system. There are two divisions of the autonomic nervous system, the sympathetic and parasympathetic systems. They work together to monitor and govern "automatic" body responses.

The **sympathetic nervous system** prepares the body for immediate adaptation through the fight-or-flight mechanism. The heart rate and output increase, which moves blood into the muscles. Vessels to the stomach and other nonvital organs constrict and detour blood to the skeletal muscles. The pupils of the eyes dilate to improve visual acuity, and the bronchioles of the lungs expand to allow for greater exchange of airflow. Increases in blood sugar and fatty acid levels provide glucose for fuel, and all digestive and excretory processes are slowed. The result is greater cellular energy production and increased mental activity. Physically, the body is preparing to protect itself. People who are highly stressed demonstrate many sympathetic nervous system responses.

The **parasympathetic nervous system** is designed to conserve energy and provide the balance for the sympathetic system's excitability. The main functions of this system are to monitor and maintain control over the "regulatory" processes of the body, which it accomplishes by governing smooth muscle tone and glandular secretions. Parasympathetic stimulation slows the heart rate, decreases circulating blood volume, relaxes sphincters, and increases intestinal and glandular activity. Respiratory, circulatory, digestive, excretory, and reproductive functions respond to parasympathetic messages. The parasympathetic nervous system uses the neurotransmitter acetylcholine to do its work, and it is often referred to as the cholinergic nervous system.

The sympathetic and parasympathetic divisions of the autonomic nervous system act in opposite ways. Fortunately, this excite and calm interaction provides a balance. Organs are rich in both adrenergic (sympathetic) and cholinergic (parasympathetic) receptor sites, and this allows the organism to maintain itself in a state of balance, or **homeostasis.** Table 7-1 lists the physical responses to parasympathetic and sympathetic nervous system stimulation. It is wise to be familiar with these responses because many people who take psychotherapeutic medications demonstrate side effects related to autonomic nervous system functions.

Table 7-1 Autonomic Nervous System Actions

TISSUE	PARASYMPATHETIC (CHOLINERGIC OR MUSCARINIC) RESPONSE	SYMPATHETIC (ADRENERGIC) RESPONSE
Eye	Constriction (miosis) Accommodation (focus on near objects)	Dilation (mydriasis)
Glands	Increased salivation (copious, watery) Increased tears and secretions of respiratory and gastrointestinal tract	Increased sweating* Increased salivation (thick, contains proteins)
Heart	Decreased rate Decreased strength of contraction Decreased conduction velocity through the atrioventricular node	Increased rate Increased strength of contraction Increased conduction velocity through the atrioventricular node
Bronchioles	Smooth muscle constriction (restricts airways)	Smooth muscle relaxation (opens airways)
Blood vessels	Constriction of vessels in heart (not a prominent effect in humans) Dilation of vessels in salivary gland and erectile tissues	Dilation of vessels in heart and skeletal muscle Constriction of vessels in skin, viscera, salivary gland, erectile tissues, kidney
Gastrointestinal tract		
Smooth muscle	Contraction	Relaxation
Sphincters	Relaxation	Contraction
Urinary bladder		
Fundus	Contraction	Relaxation
Trigone and sphincter	Relaxation	Contraction
Uterus		Contraction
Liver		Glycogenolysis

Data from Clark JF, Queener SF, Karb VB: *The pharmacologic basis of nursing practice*, ed 6, St Louis, 2000, Mosby.
*Acetylcholine is the neurotransmitter for this response.

The basic unit of the nervous system is the **neuron**, or nerve cell. Its function is to transmit electrical information to other neurons. Electrical information traveling through a neuron generates a chemical messenger called a **neurotransmitter**. Although nerve cells are found in great abundance throughout the body, they are not physically connected to each another. Each neuron is separated by a small space or gap called a **synapse.** Neurotransmitters travel across this gap, open a channel for the electrical information to pass, and then quickly become inactivated. Neurotransmitters are divided into four groups: monoamines, cholinergic group, amino acids, and neuropeptides. Many psychotherapeutic drugs alter the flow of message exchanges in or around the synapse. The study of the neurochemistry of behavior has already altered the way in which mental-emotional problems are considered.

CLASSIFICATIONS OF PSYCHOTHERAPEUTIC DRUGS

The traditional four classes of psychotherapeutic medications are (1) antianxiety agents; (2) antidepressants; (3) mood stabilizers, which are used to treat mood or emotional disorders; and (4) **antipsychotics,** which help curb the hallucinations and loss of reality experienced by individuals with psychotic disorders. Two newer classes of psychotropic medications are the stimulants and antiobsessive agents (NAMI, 2011).

Millions of people are currently being treated with psychotherapeutic drugs. People receiving psychotherapeutic (also called psychotropic) medications must be routinely monitored for effectiveness, side effects, and life-threatening adverse reactions. Because of this need for close monitoring, *all* health care providers must be knowledgeable about the roles that these powerful chemicals play in treating mental illness.

ANTIANXIETY MEDICATIONS

Anxiety is common to us all, but when it interferes with one's ability to function, it becomes an anxiety disorder. In today's world, anxiety disorders are a common mental health problem. A thorough discussion of anxiety and its treatments can be found in Chapter 18. Here we consider the antianxiety medications that are a usual part of the therapeutic treatment plan.

Antianxiety agents are drugs that reduce the psychic tension of stress. They are also referred to as anxiolytics or "minor tranquilizers." Medications in the antianxiety group are divided by their chemical formulas into categories. Table 7-2 lists the major drugs used for anxiety and depression.

The benzodiazepines have "dominated clinical practice for more than three decades" (Keltner and Folks, 2005) in the treatment of anxiety disorders. They are effective, are generally well tolerated, and do not affect sleeping patterns (a common problem with many psychotherapeutic drugs). Benzodiazepines are prescribed to provide sedation, induce sleep (called a hypnotic), prevent seizures, and prepare clients for general anesthesia, but they are mainly used to decrease anxiety.

People with high levels of anxiety have low levels of a neurotransmitter called gamma-aminobutyric acid (GABA). Benzodiazepines act by increasing GABA activity, which results in decreased anxiety. They are fast acting, with the onset of action occurring within 1 hour. The drug exerts its action (duration) for about 4 to 6 hours. Thus, clients experience relief from symptoms within hours.

Benzodiazepines are metabolized by the liver and excreted by the kidneys. People with impaired liver or kidney function must be carefully monitored if this drug class is prescribed. Pregnant and nursing women are usually not treated with benzodiazepines because these medications enter the breast milk. Caution must also be used when administering antianxiety agents to older or debilitated adults because of their slower metabolism.

The side effects of benzodiazepines are usually minimal, but they include fatigue, sedation, dizziness, and orthostatic hypotension (a drop in blood pressure on standing). Because long-term use of antianxiety drugs can result in dependence, therapy for clients is usually limited to a few months.

The antianxiety agent called buspirone (BuSpar) differs from benzodiazepines in several ways. First, it belongs to a different chemical class, the azaspirones, and does not cause the sleepiness or muscle relaxation associated with benzodiazepines. Second, therapeutic effects are not seen for 3 to 6 weeks after beginning treatment. Buspirone has less potential for abuse; however, clients are still cautioned to avoid alcohol. Third, the potential for overdose is lessened because the drug has a wide dosage range. Side effects are few: light-headedness, dizziness, headache, and nausea (Keltner and Folks, 2005).

Table 7-2 Antianxiety and Antidepressant Medications

DRUG CLASS	EXAMPLES	COMMENTS
Azaspirones (for anxiety)	Buspirone (BuSpar)	Takes 2-4 wk to relieve symptoms of anxiety; not habit forming; does not impair memory, balance, or cause sedation; minimal side effects
Benzodiazepines (for anxiety)	Triazolam (Halcion), lorazepam (Ativan), chlordiazepoxide (Librium), diazepam (Valium)	Oldest anxiolytic; fast acting; main side effect is drowsiness; potential for dependency; withdrawal symptoms if stopped abruptly
Beta-blockers (for anxiety)	Propranolol (Inderal), atenolol (Tenormin)	Used to treat social phobias; reduces palpitations, sweating, tremors, blood pressure, and heart rate
Tricyclics (TCAs) (for depression, anxiety)	Amitriptyline (Elavil), desipramine (Norpramin), doxepin (Sinequan, Triadapin), imipramine (Tofranil), nortriptyline (Pamelor)	Takes 2-3 wk to take effect; side effects: drowsiness, dry mouth, dizziness, weight gain, impaired sexual function; treats anxiety, depression, posttraumatic stress disorder (PTSD), obsessive-compulsive disorder
Monoamine oxidase inhibitors (MAOIs) (for depression)	Phenelzine (Nardil), tranylcypromine (Parnate), selegiline (Carbex)	Not often prescribed because of serious adverse reactions and interactions with food and drugs; strong dietary restrictions
Selective serotonin reuptake inhibitors (SSRIs) (for depression)	Citalopram (Celexa), fluvoxamine (Luvox), fluoxetine (Prozac), paroxetine (Paxil), sertraline (Zoloft)	First choice for treating anxiety, depression, other problems; side effects: gastrointestinal (GI) distress, headache, dizziness, sexual dysfunction
Atypical antidepressants (for depression)	Mirtazapine (Remeron), bupropion (Wellbutrin), maprotiline (Ludiomil), trazodone (Desyrel)	Agitation can occur with bupropion; common side effects: sleepiness, increased appetite, weight gain, dizziness
Selective serotonin/norepinephrine reuptake inhibitors (SSNRIs) (for depression)	Nefazodone (Serzone), venlafaxine (Effexor)	Side effects: nausea, dry mouth, dizziness, sedation, sweating, anorexia; monitor blood pressures

A drug called pregabalin (Lyrica) is currently being introduced to treat several kinds of anxiety disorders, as well as seizures and neuropathic pain. Side effects are fewer than other antianxiety drugs, so clients are more likely to comply with their treatment.

Antianxiety drugs have several drug interactions, including CNS depression when they are combined with other CNS depressants, such as alcohol and street drugs (Skidmore-Roth, 2011). The combination can produce serious, even fatal, reactions. Concentrations of the cardiac drug digoxin may be increased during treatment with antianxiety medications, so clients taking this medication must be routinely assessed for signs or symptoms of digoxin toxicity. Antacids should not be taken because they interfere with absorption of the antianxiety agent into the bloodstream.

Nursing care for clients receiving antianxiety agents includes frequent assessments for therapeutic actions and side effects. Many of these drugs are prescribed on an "as needed" (prn) basis. Medications used on this basis require accurate client assessments, good judgment, repeated evaluations of the medication's effects, and objective documentation.

ANTIDEPRESSANT MEDICATIONS

Feelings of great joy and deep sadness are common human experiences. We are all familiar with these emotional extremes and think of them as the natural highs and lows of everyday life, but when one's mood begins to interfere with the ability to perform the routine activities of daily living, intervention is needed. **Mood disorders** are ineffective emotional states, ranging from deep depression to excited elation. They are also called **affective disorders** because the word *affect* means emotions. The major mood disorders are discussed in Chapter 21.

Antidepressant medications exert their action in the body by increasing certain neurotransmitter activities. Based on their chemical formula, antidepressants are divided into categories: tricyclic antidepressants, **monoamine oxidase inhibitors (MAOIs)**, selective serotonin reuptake inhibitors (SSRIs), atypical antidepressants, and selective serotonin/norepinephrine reuptake inhibitors (SSNRIs) (see Table 7-2).

The physician's first choice for the treatment of depression is often an antidepressant. Antidepressants are also indicated for bipolar disorders, panic disorders, obsessive-compulsive disorders, enuresis (bedwetting), bulimia, and neuropathic pain. Antidepressants have been used with success in posttraumatic stress disorder, organic mood disorders, attention-deficit/hyperactivity disorder, and conduct disorders in children.

Antidepressants interact with a variety of other substances. Because they block the destruction of specific major neurotransmitters, higher levels of these chemicals circulate throughout the body. Ingesting foods or drugs that contain certain chemicals produces more neurotransmitters, which can result in overstimulation of the nervous system. Antidepressant drug interactions can produce serious cardiovascular and blood pressure reactions, as well as CNS depression. Table 7-3 describes the more serious drug interactions encountered with the MAOI antidepressants.

Antidepressant medications require 1 to 4 weeks before relief is noticed. However, side effects may be experienced soon after beginning therapy. Some side effects are a nuisance, such as a dry mouth. Others, such as a **hypertensive crisis** (a sudden, severe elevation in blood pressure) can be life threatening. **Anticholinergic side effects** include dryness of the mouth, nose, and eyes; urinary retention; and sedation. These discomforts can be so bothersome that some people refuse to take their medications regularly. Clients should be routinely monitored for physical and behavioral changes. Those experiencing postural hypotension should be protected from falls. Kidney and liver function should be assessed and monitored monthly. Any signs of toxicity (e.g., headache, stiff neck, palpitations) should be reported to the physician immediately.

Clients should also be assessed for changes in attitudes and suicidal gestures. Frequently, depressed people attempt suicide when taking antidepressants because of increased energy levels that can lead to a renewed interest in suicide. Take precautions to protect clients if you believe that they may be suicidal. Changes in a client's behavior may indicate a therapeutic improvement, a drug side effect, a drug-food interaction, or an emerging psychosis. Good communication with clients helps to assess subtle changes that may indicate problems.

Clients, no matter which medications they are taking, must be taught about their drug therapy. Instructions should include information about dosages, actions, and

Table 7-3 Drug Interactions with Monoamine Oxidase Inhibitors

TYPE OF INTERACTION	SIGNS/SYMPTOMS
Anticholinergic reactions	Dry mouth, decreased tearing, blurred vision, constipation, urinary hesitancy or retention, excessive sweating
Hypertensive crisis	Throbbing, radiating headache, stiff neck, palpitations, tightness in chest, sweating, dilated pupils, very high blood pressure and pulse rate
CNS depression	Changes in level of consciousness, sedation, increasing lethargy, disorientation, confusion, agitation, hallucinations, lower seizure threshold

CNS, Central nervous system.

wanted and unwanted effects. Those who are taking MAOIs must understand their dietary and drug restrictions. Box 7-1 lists the foods and medications that must be avoided while taking MAOIs.

SSRIs are the first choice in treatment for many physicians because their side effects are more manageable (Box 7-2). Because of this, SSRIs are indicated for both short- and long-term therapy.

MOOD STABILIZER MEDICATIONS

Mania is a state characterized by excitement, great elation, over-talkativeness, increased motor activity, fleeting grandiose ideas, and agitated behaviors. Some therapists refer to mania as agitated depression because it frequently occurs with severe depression. Antidepressant drug therapy helps clients cope with their depression, but it has little effect during the manic stage of behavior.

Lithium is a naturally occurring salt. In 1949, lithium was found to be effective in the treatment of mania, but because of reports of fatal side effects, the drug was not available in the United States until 1970. Lithium is the mainstay treatment of the manic phase of bipolar depression. Newer products are currently available for clients who do not respond or cannot tolerate lithium therapy. Table 7-4 lists the major antimanic medications.

Box 7-1 Dietary and Drug Interactions with Monoamine Oxidase Inhibitors

MEDICATIONS TO AVOID*

MAOIs should not be given with other MAOI drugs.

May cause hyperpyrexia, severe convulsions, hypertensive crisis, and death when combined with tricyclic antidepressants.

Enhances the effects of insulin, oral hypoglycemics, diuretics, and antihypertensives.

May change seizure patterns if used with anticonvulsants.

FOODS TO AVOID

Aged cheeses, avocados, bananas, figs, beer, broad beans, dried sausage, fish, liver, meats prepared with tenderizer, pickled herring, poultry, raisins, red wine, salami, sauerkraut, sour cream, soy sauce, yeast extract, yogurt

Data from Workman L, LaCharity L, Kruchko S: *Understanding pharmacology: Essentials for medication safety*, St Louis, 2011, Elsevier; and Edmunds, M: *Introduction to clinical pharmacology*, ed 7, St Louis, 2013, Elsevier.

*Any medication should be approved by the physician.

Box 7-2 Side Effects of SSRI Antidepressants

Dry mouth, nausea, vomiting, constipation, diarrhea, anorexia, differences in taste; headache, changes in alertness, tremor, dizziness, weakness, fatigue, increased sweating; sexual dysfunction; visual disturbances; urinary disturbances

Table 7-4 Commonly Prescribed Antimanics

GENERIC NAME	TRADE NAME
carbamazepine	Tegretol
clonazepam	Klonopin
lithium	Carbolith, Duralith, Eskalith-CR, Lithobid, Lithotabs
lamotrigine	Lamictal
gabapentin	Neurontin
topiramate	Topamax
valproic acid	Depakene

Lithium is currently used in the United States for the treatment of manic episodes. Because lithium stabilizes mood, it is indicated for the treatment of acute mania and as a prophylaxis (preventative) for clients with bipolar disorders. Lithium has also been investigated for the treatment of drug abuse, alcoholism, phobias, and eating disorders. Therapy is contraindicated (not prescribed) for pregnant women and people with kidney failure. Clients with physical health problems must be carefully monitored.

Lithium is well absorbed into the bloodstream and excreted faster than sodium by the kidneys. For this reason, clients who are taking lithium must be cautioned about balancing their salt intake, fluid intake, and activity. Lithium interacts with a variety of other drugs. For a list of significant drug interactions associated with antimanic drugs, consult a drug reference.

The difference between therapeutic and toxic levels of lithium is minimal. The drug is usually well tolerated by most clients, but how well the drug is excreted varies from client to client. The "narrow therapeutic index" of lithium requires close observation of client responses. If the blood levels are too low, manic behavior returns. However, if levels are too high, an uncomfortable and possibly life-threatening toxicity may result. Lithium levels higher than 1.5 mEq/L are considered toxic.

Clinical improvement commonly takes as long as 3 weeks. Clients in the acute manic stage usually require the addition of antipsychotic or sedative medications until the effects of lithium take hold. Clients are monitored monthly for thyroid and kidney functions because long-term use of lithium can cause altered thyroid function (hypothyroidism) and loss of the kidney's ability to concentrate urine. Great care must be taken to frequently assess and monitor each client's responses to each medication because undesirable effects are present with every medication the client receives.

The major guidelines for care of clients taking lithium relate to three areas: helping with the pre-lithium workup, educating the client to maintain stable blood levels of the drug, and monitoring the client for side effects and possible toxic reactions.

The pre-lithium workup consists of a complete physical, history, electrocardiogram (ECG), and numerous blood studies. Nurses are responsible for obtaining a complete functional assessment that describes the client's habits and activities of daily living. They should also review the results of all diagnostic tests. Data from these assessments are used to plan appropriate care and forecast potential problems.

Stabilizing lithium levels involves teaching the client and family about the following: expected side effects, the difference between common side effects and those requiring immediate notification of the physician, and coping with the lifestyle changes required by this medication. Box 7-3 lists the most important guidelines for clients who are receiving lithium.

Make sure the client and family understand each bit of information. Ask them to repeat what they have learned, apply it to several "what if" situations, and describe the appropriate actions for each side effect. Reinforce the information with written instructions. The informed client is a more willing participant in treatment.

ANTIPSYCHOTIC (NEUROLEPTIC) MEDICATIONS

Antipsychotics are also called major tranquilizers or neuroleptics. Most antipsychotic medications are available in tablet, liquid, and injectable forms. Each class of antipsychotics has profound effects on the most complex of all body systems—the brain and nervous system.

Most antipsychotic drugs are used to treat the symptoms of major mental disorders, such as schizophrenia, acute mania, and organic mental illnesses. They are also used with some resistant bipolar (manic-depressive), paranoid, and movement disorders. A few antipsychotics are used to treat nausea, vomiting, and intractable hiccups. Table 7-5 lists the most common antipsychotic drugs.

The psychosis called schizophrenia is associated with two groups of symptoms: Type 1, are called positive schizophrenic symptoms, and Type 2, are negative schizophrenic symptoms (Table 7-6). Antipsychotic medications appear to be much more effective in controlling the positive symptoms of acute schizophrenia. Their use for clients with chronic brain disorders remains controversial because these drugs block already depleted dopamine (a neurotransmitter) pathways.

Antipsychotic medications interact with many other chemicals. For example, antacids hinder the absorption of antipsychotic drugs, so they must be administered 2 hours after the oral antipsychotic. Alcohol, antianxiety medications, antihistamines, antidepressants, barbiturates, meperidine (Demerol), and morphine produce severe CNS depression when mixed with antipsychotics. As a health care provider, you are responsible for the safety of your clients. Research every medication and over-the-counter drug for possible interactions with the prescribed

Box 7-3 Guidelines for Clients Taking Lithium

To achieve a therapeutic effect and prevent lithium toxicity, clients taking lithium should be advised of the following:

1. Lithium must be taken on a regular basis at the same time daily. If you miss a dose, wait until the next scheduled time to take the lithium.
2. When lithium treatment is started, mild side effects may develop, such as fine hand tremor, increased thirst and urination, nausea, anorexia, and diarrhea or constipation. Some foods, such as celery and butter fat, may have an unappealing taste. Most side effects will pass with time.
3. Serious side effects of lithium include vomiting, extreme hand tremor, sedation, muscle weakness, and dizziness. Notify the physician immediately if any of these effects occur.
4. Lithium and sodium compete for elimination from the body through the kidneys. An increase in salt intake increases lithium elimination, and a decrease in salt intake decreases lithium elimination. Thus it is important that the client maintain a balanced diet, liquid, and salt intake. The client should consult the physician before making any dietary changes.
5. Various situations can require an adjustment in lithium doses; for example, the addition of a new medication to the client's drug regimen, a new diet, or an illness with fever or excessive sweating.
6. Blood for determination of lithium levels should be drawn in the morning, approximately 8 to 14 hours after the last dose was taken.

Modified from Keltner NL, Folks DG: *Psychotropic drugs*, ed 4, St Louis, 2005, Mosby.

Table 7-5 Commonly Prescribed Antipsychotics

GENERIC NAME	TRADE NAME
Phenothiazines	
chlorpromazine	Thorazine
fluphenazine	Prolixin
mesoridazine	Serentil
perphenazine	Trilafon
prochlorperazine	Compazine
promazine	Sparine
thioridazine	Mellaril
trifluoperazine	Stelazine
Butyrophenone	
haloperidol	Haldol
Miscellaneous	
aripiprazole	Abilify
clozapine	Clozaril
loxapine	Loxitane
olanzapine	Zyprexa
quetiapine	Seroquel
risperidone	Risperdal
thiothixene	Navane
Ziprasidone	Geodon

Table 7-6 Positive and Negative Symptoms of Schizophrenia

	TYPE I: POSITIVE SYMPTOMS	TYPE 2: NEGATIVE SYMPTOMS
Signs and symptoms	Delusions, illusions, hallucinations	Anergia (lack of energy); anhedonia (inability to feel happiness or pleasure); apathy (does not care about anything); avolition (unable to choose or exert own will); flat affect (no emotional responses); will not speak unless spoken to
Anatomy and physiology	Hyperdopaminergic reactions (too much dopamine)	Nondopaminergic reactions (too little dopamine)
	Brain size and structure normal	Brain has structural changes: decreased blood flow, increased size of ventricles, decrease in size of brain
Response to antipsychotic medications	Usually good	Usually poor

antipsychotic, and monitor your clients' responses to each drug. If drug references do not contain enough information, consult the pharmacist or physician.

The side effects and adverse reactions of antipsychotic medications are numerous and troublesome for the client. Both the central and peripheral nervous systems are affected by antipsychotics. **Extrapyramidal side effects (EPSEs)** are defined as abnormal movements produced by an imbalance of neurotransmitters in the brain. The most common EPSEs are listed in Table 7-7.

Peripheral nervous system side effects include dry mouth, blurred vision, photophobia (sensitivity to bright light), tachycardia, and hypotension. Caregivers must protect clients from falls during the first few weeks of therapy because the chance for low blood pressure (hypotension) is greatest when clients stand or change positions suddenly. These hypotensive episodes cause tachycardia (rapid heartbeat) as the body attempts to adapt to a lower blood pressure. Antipsychotic drugs affect each person uniquely. They are powerful medications that must be administered with great care.

Table 7-7 Extrapyramidal Side Effects of Antipsychotics

SIGN/SYMPTOM	DEFINITION
Akathisia	The inability to sit still
Akinesia	Absence of physical and mental movement
Drug-induced parkinsonism	Term used to describe a group of symptoms that mimic Parkinson's disease
Dyskinesia	The inability to execute voluntary movements
Dystonia	Impaired muscle tone (rigidity in the muscles that control gait, posture, and eye movements)
Neuroleptic malignant syndrome (NMS)	A serious and potentially fatal side effect with unstable vital signs, fever, confusion, muscle rigidity, tremor, incontinence
Tardive dyskinesia	Irreversible side effect of long-term treatment that produces involuntary, repeated movements of muscles in the face, trunk, arms, and legs

OTHER PSYCHOTROPIC MEDICATIONS

The SSRI antidepressants are often used to treat obsessive-compulsive disorders. Examples include the brand names Anafranil, Luvox, Paxil, Prozac, and Zoloft.

Stimulants are used to treat people with ADHD (Attention Deficit Hyperactivity Disorder). Table 7-8 lists the most frequently prescribed stimulants.

CLIENT CARE GUIDELINES

Nurses and those who administer psychotherapeutic drugs have five basic responsibilities relating to these medications: (1) to assess clients, (2) to coordinate care, (3) to administer medications, (4) to monitor and evaluate client responses, and (5) to teach clients about their medications. Each area of responsibility involves careful observation and an understanding of each drug's therapeutic and adverse actions. All caregivers should be aware of their clients' medication regimens and report any unusual signs or symptoms to the nurse or physician.

ASSESSMENT

The first step of the nursing (therapeutic) process is the most important because an accurate and complete data-

Table 7-8 Commonly Prescribed Stimulants

GENERIC NAME	TRADE NAME
amphetamine and dextroamphetamine	Adderall
dextroamphetamine	Dexadrine
methylphenidate	Ritalin
bupropion	Wellbution

base enhances the quality and effectiveness of client care. Many nurses are very skilled with the psychosocial and mental status assessments necessary for the care of clients with mental-emotional problems. However, it is important to remember that physical difficulties are common companions of psychic problems. See the following Case Study for a vivid example of this principle.

Case Study

Gary T., a 36-year-old man, is admitted to the mental health unit of the community hospital with a diagnosis of paranoid schizophrenia. He is considered a danger to others because of his aggressive and uncooperative behavior. After receiving a major tranquilizer, he spent a relatively quiet night but cried out frequently. Today, Mary S. is assigned to care for him.

After reviewing the change-of-shift report and Gary's record, Mary decides that he needs a thorough assessment, so she goes in search of her client. She is surprised to find a rather burly, bearded man lying curled on his side and whimpering quietly to himself. While knocking on the door, she introduces herself and requests a few minutes of his time. "Hardly matters," he grumbles softly.

Mary approaches his bed carefully, remembering his tendency for physical aggression. As she seats herself near his bedside, she thinks that she caught an expression of pain. Acting on this nonverbal message, Mary gently questions, "Where are you hurting?"

Gary looks straight into her eyes and says through clenched teeth, "I think it's my back or legs or something. Ever since this pain started, I've been unable to control myself. All I want to do now is make everybody who is messin' with me hurt as much as I do."

This is the clue that sends Mary on the path of assessing Gary's pain. She discovers in his past medical history that Gary had fallen off a roof about 3 months ago. The injuries had not resolved, and attempts at treatment were resulting in ever-increasing discomfort. Pain medications, even when combined with alcohol, had little effect on the pain. Mary's physical assessment reveals difficulties with walking, sitting, and changing positions. He is not able to lift his legs off the bed.

Mary knows that something is physically wrong. Her first priority of care is to help Gary find some relief from his pain. After sharing her findings with her supervisor, Mary consults the physician in charge of Gary's case, who orders several diagnostic tests. The results of the tests reveal a large herniated disk in his back. Gary is immediately transferred and prepared for surgery.

Weeks later, a large, burly man approaches Mary in the hallway. He reminds her of someone familiar, but she cannot quite place him. As he draws closer, she recognizes Gary, who has come to thank her for listening to him. "I told the others that I was hurtin', but they didn't listen, so I got upset. I guess I can be pretty rowdy when I'm hurtin'. But you listened to me, and I had surgery, and the pain is gone. I can be a nice guy again. If you hadn't listened to me, I'd really be crazy by now. Thanks."

Mary feels great but reminds herself to carefully and thoroughly (physically, emotionally, socioculturally, and spiritually) assess each client as a unique individual. The answer to a complex problem may lie in a simple solution, but one must be alert enough to recognize the clues.

- What do you think may have happened if Mary had not assessed a physical problem with this mental health client?

A history should be completed for every client, whether the presenting problems are of physical or mental origin. A complete health history includes a profile of the client's current living situation, family structure, and daily activities. Attention should also be paid to his or her past medical, family, and social histories. An investigation of the client's chief complaint (problem) rounds out the basic database. Laboratory and other diagnostic studies may be ordered by the physician or nurse practitioner, and special medication assessments must be conducted for clients receiving psychotherapeutic medications (Stuart, 2009). Table 7-9 offers an example of a medication history assessment tool. Assessing clients is a continual process. Good physical and psychosocial assessments add an important dimension to the client's overall plan of holistic care.

COORDINATION

Physicians prescribe treatments; psychologists recommend therapies; and social workers, psychologists, and other health care team members propose plans of care based on their area of expertise. Nurses coordinate and ensure that each component of the treatment plan is carried out. They juggle scheduling for tests, treatments, and therapies; monitor responses to medications; teach clients and their significant others about treatments, medications, and other aspects of therapy; and encourage clients to become actively engaged in their treatment. Nurses also act as advocates, consult with other members of the treatment team throughout the client's stay, and provide care that encourages clients toward wellness.

Each health care team member coordinates client care with others. Multidisciplinary care planning meetings are held frequently to discuss client progress and problems from each specialist's viewpoint. Treatment goals are discussed, and care plans are updated as client behavior changes.

DRUG ADMINISTRATION

One traditional role of nurses is the administration of medications to clients. Today, in some facilities, this task has fallen to the certified medication aide (CMA). The term certified medical technician (CMT) is also used. CMAs or CMTs are usually nursing assistants with specialized training in the administration of certain oral medications. However, it remains the responsibility of the nurse to monitor clients for drug effectiveness and adverse reactions. Other care providers should also be aware of the actions and side effects of their clients' medications.

It is not uncommon for a client to be taking two or more psychotherapeutic drugs at the same time. In these instances, caregivers must be especially vigilant for side effects and signs of drug interactions.

Table 7-9 Medication History Assessment Tool

PSYCHOTHERAPEUTIC MEDICATIONS	OTHER PRESCRIPTIONS	OVER-THE-COUNTER DRUGS	SUBSTANCE USE
Each drug ever taken	**Each drug in past 6 months**	**Each drug in past 6 months**	**Alcohol, caffeine, street drugs**
Drug name?	Drug name?	Drug name?	Substance(s)?
Reason for prescription?	Reason for prescription?	Reason for taking?	When used?
When started?	When started?	When started?	
Length of time taking drug?	Length of time taking drug?	Frequency of use?	Frequency of use?
Highest daily dose?	Highest daily dose?	Highest dose?	
Effectiveness?	Effectiveness?	Effectiveness?	Effects?
Side effects, adverse reactions?	Side effects, adverse reactions?	Side effects, adverse reactions?	Side effects, adverse reactions?
Any physical changes since starting medication?	Any physical changes since starting medication?		Any problems associated with use?
Was drug taken as prescribed (compliance)?	Was drug taken as prescribed (compliance)?		

Modified from Stuart GW, Laraia MT: *Pocket guide to psychiatric nursing*, ed 5, St Louis, 2001, Mosby.

MONITORING AND EVALUATING

Physicians evaluate client responses and adjust medical therapies, but care providers are in the best position to observe the physical and behavioral changes that accompany the administration of psychotherapeutic medications. All caregivers should be familiar with the major side effects and adverse reactions for each class of psychotherapeutic drugs used in their practice settings.

Interactions with other medications and substances can become life threatening. For example, when alcohol is combined with antidepressant drugs, severe CNS depression occurs. This in turn results in lethargy, progressing to respiratory depression, coma, and even death. Certain groups of people are at an increased risk for developing drug interactions, including older adults, debilitated people, people with immunosuppressed or compromised organ systems (especially liver and kidneys), and clients who have physical illnesses.

Critical Thinking

You are monitoring the responses of three clients who are taking Haldol. The first client is a 23-year-old woman, the second is a 50-year-old man, and the third is a 76-year-old man.

- Which client is at greatest risk for developing side effects?
- What are your reasons for making this choice?

Monitoring clients' responses to their drugs is an important, potentially lifesaving intervention. Do not take this responsibility lightly, because your clients depend on your knowledge.

CLIENT TEACHING

Every individual has a right to be informed about his or her diagnosis and treatment plan. Each client must be prepared to safely take each medication, monitor for side effects daily, and know what course of action to take when side effects occur. See Table 7-10 for client teaching guidelines.

Nurses must be able to reach clients on their own level of understanding. To prevent miscommunication, the nurse must speak in terms that the client can grasp and proceed at a pace that allows for understanding and the formulation of questions. Most psychotherapeutic medications slow the client's ability to follow and understand a line of thought. Therefore, it is important to repeat essential points. Be sure the client comprehends by having him or her repeat the most important information

Provide information in writing. Having a written explanation gives the client something tangible and real that can be reviewed and referred to when memory fails. Clients taking psychotherapeutic medications are likely to forget what has been taught. Preprinted drug information is helpful, but there is no substitute for individualized client teaching. If possible, include the family or significant others. They can be very helpful in assisting the client with following the medication routine.

Helping clients and their significant others to adapt to change is a health care provider's responsibility. Psychotherapeutic medications are designed to produce behavioral changes, and these changes affect the client and people within the client's environment.

Table 7-10 Teaching Guidelines: Psychotropic Medications

NURSING PROCESS	EXAMPLES OF ACTIONS
Assessment	Assess client for the following: Level of understanding Ability to self-administer medications Willingness to take medications on a daily basis Level of cooperation Ability to obtain and purchase medications Support of family Past medication history, including side effects of any drug taken
Planning	Nursing diagnoses: Deficient knowledge: psychotherapeutic medications Risk for noncompliance
Interventions	For each drug, teach client to recognize the following: Generic and brand names Purpose and action Therapeutic effects Dosage, route, schedule of drug Administration, what to do if a dose is missed Specific precautions (driving, operation of power equipment) Side effects and actions to take if they occur Possible drug/food interactions Signs of overdosage or underdosage Drug storage, expiration dates Provide information in written form Develop written medication schedule Reinforce other data given by care team
Evaluation	Observe client to evaluate effectiveness of teaching Reassess if any areas of instruction were not understood by client or family

A well-informed client and family are able to cope more effectively with the life changes that result from psychiatric drug therapy.

SPECIAL CONSIDERATIONS

Because psychotropic medications affect the body's nervous system, they are potentially harmful chemicals. Professionals with prescriptive authority must weigh the benefits of therapy with the possible harm that may result from the side effects or adverse reactions of a medication.

ADVERSE REACTIONS

Health care providers, especially nurses, must constantly remain vigilant for the effects of psychotherapeutic medications. Clients who are taking psychotropic drugs (especially antipsychotics) are at risk for developing the serious problems of neuroleptic malignant syndrome and tardive dyskinesia. Accurate identification of the signs and symptoms of each may prevent many complications. Detailed descriptions of these and other drug reactions are found in Chapter 31.

NONCOMPLIANCE

An informed decision made by a client not to follow a prescribed treatment program defines **noncompliance**. Many psychiatric clients choose to discontinue or reduce their medications because of the distressing side effects. Others have difficulty following treatment programs because of the nature of their problems. For example, paranoid or delusional people seldom cooperate with medication regimens or schedules. One study found that "about 40% of patients stopped taking their prescribed medications within one year" (Jarboe, 2002). Many outpatient clients do not take their medications as prescribed. Even clients within inpatient settings do not take their medications consistently. It is not uncommon for people to hide drugs in the cheek or pretend to swallow and then discard or hoard them. The physician should be notified in these cases, and a liquid form of the medication should be requested.

The keys to improving client compliance are education and an effective client-caregiver relationship (Balon, 2002). Work with your clients to find and eliminate the factors that lead to noncompliance. Simplify the medication routine, if possible. Teach about and monitor for side effects and adverse reactions.

INFORMED CONSENT

Another consideration relating to psychotherapeutic medications is the issue of informed consent. **Informed consent** is the process of presenting clients with information about the benefits, risks, and side effects of specific treatments, thus enabling them to make voluntary and knowledgeable decisions about their care. With the treatment of physical disorders, the process is straightforward: Treatments are described, and the client makes the decision to accept or reject the plan. However, with mental disorders, the picture is not so clear. In the past, psychiatric clients who were considered a danger to themselves or others were routinely medicated without their permission.

Today, the Patient Self-Determination Act states that clients have the right to accept or refuse care and cannot be pushed, coerced, or talked into following a certain course. In 1986, the New York Court of Appeals held that

"in nonemergency situations, involuntary patients cannot be forced to take psychotic medications" (Keltner, Bostrom, and McGuinness, 2011). This ruling has led to an uncomfortable compromise between client rights and people's needs to feel safe.

When clients stop taking their medications, care guidelines focus on ensuring safety and assessing for the return of symptoms. When caring for the client within an inpatient setting, caregivers should observe for any changes in behavior, be prepared for the client to become aggressive or act out, and protect the client and others from harm. If the setting is the clinic, the caregiver should instruct the client's significant others about the return of psychiatric symptoms, the signs and symptoms of side effects and adverse reactions, and the available community resources. Although care providers cannot manipulate or force clients into taking medications, they can use their rapport and communication skills to assist clients in making decisions based on complete information and sound judgment. "Agency policies about informed consent must be followed to protect the patient, staff, and agency" (Finkelman, 2000).

New drugs are being developed—ones that act more specifically, have a shorter onset, and produce fewer side effects. More treatments and therapies will be introduced. Complementary and alternative medicine will play a growing role in mental health care. It is our responsibility to safely practice within this sea of change.

Get Ready for the NCLEX® Examination!

Key Points

- Psychotherapeutic medications are powerful chemical substances that produce their effects on the nervous system by interrupting the chemical messenger (neurotransmitter) pathways within the brain.
- Four classes of psychotherapeutic medications are antianxiety agents, antidepressants, antimanics, and antipsychotics.
- Drugs for the treatment of anxiety include the benzodiazepines, the azaspirones, and beta-blockers for social phobias. Their main side effects are sedation and gastrointestinal (GI) disturbances.
- Antidepressant medications treat depression and other mood disorders by increasing certain neurotransmitter activity within the brain and CNS.
- Mania and bipolar depressive illnesses are treated with lithium, a naturally occurring mood stabilizer.
- The major guidelines for care of clients taking lithium are to help with the pre-lithium workup, to educate the client to maintain stable blood levels of the drug, and to monitor the client for side effects and possible toxic reactions.
- Antipsychotic drugs are indicated for clients with schizophrenia, acute mania, organic mental illnesses, some resistant bipolar disorders, paranoid disorders, some disorders of movement, nausea and vomiting, and intractable hiccups.
- Extrapyramidal side effects include CNS alterations that produce abnormal involuntary movement disorders. Peripheral nervous system side effects include dry mouth, blurred vision, photophobia (sensitivity to bright light), tachycardia, and hypotension.
- Clients who are receiving antipsychotics are at risk for developing the serious problems of neuroleptic malignant syndrome and tardive dyskinesia.
- Nurses who work with clients who are receiving psychotherapeutic drugs have five basic responsibilities: to assess, to coordinate, to administer, to monitor and evaluate, and to teach.
- A special medication assessment (drug history) must be conducted for clients receiving psychotherapeutic medications.
- A primary responsibility of nurses is to monitor clients for drug effectiveness and adverse reactions.
- Client education is a major role of nurses.
- Noncompliance is defined as an informed decision made by a client not to follow a prescribed treatment program.
- Informed consent is presenting clients with information about the benefits, risks, and side effects of specific treatments, thus enabling them to make decisions about their care.

Additional Learning Resources

SG Go to your Study Guide at the back of this text for additional learning activities to help you master this chapter content.

evolve Go to your Evolve website (http://evolve.elsevier.com/Morrison-Valfre/) for additional online resources.

Review Questions for the NCLEX® Examination

1. Psychotherapeutic drug therapy works primarily by:
   1. Causing vasodilatation within the nervous system
   2. Disrupting blood flow within the brain
   3. Opening major nerve pathways within the brain
   4. Altering chemical balances within the nervous system

2. One of the major disadvantages of benzodiazepines prescribed for anxiety is that these medications:
   1. Take 4 to 6 weeks before onset of action occurs
   2. Cause dependency with long-term use
   3. Often cause serious side effects
   4. Are new to the market with little research

3. A female client is taking an antipsychotic medication for her schizophrenia. The nurse monitors this client for the peripheral nervous system side effects of:
   1. Dry mouth, photophobia, and hypotension
   2. Hypertension, photophobia, and bradycardia
   3. Elevated blood glucose levels
   4. Tremors and inability to sit still

4. The nurse is planning the discharge of a client who has been prescribed an antipsychotic medication for paranoid schizophrenia. The nurse knows that the client is most at risk for:
   1. Diabetes
   2. Bipolar disorder
   3. Noncompliance
   4. Fluid volume, deficient

5. A female client has been taking an antipsychotic medication for several years. It is of vital importance for the nurse to observe the client for tardive dyskinesia. Signs and symptoms of tardive dyskinesia include:
   1. Absence of physical and mental movement
   2. Loss of ability to perform voluntary movements
   3. Repetitious, involuntary muscle movements in the face and extremities
   4. Rigidity in the muscles that control an individual's gait, posture, and eye movements