Overview

MENTAL HEALTH & DRUGS
Approximately one-third of adults with any mental disorder, such as depression, schizophrenia, bipolar disorder, anxiety disorders, and personality disorders, also have a co-occurring substance use disorder. Some 50% to 70% of substance abusers also have a co-occurring mental health disorder. One reason is that the same neurotransmitters affected by mental illness are also affected by psychoactive drugs.

Addictions and related disorders consist of substance abuse and substance dependence. Substance induced disorders consist of intoxication, withdrawal and temporary (usually) or permanent symptoms of certain mental health disorders.

Mental illness is determined by the combined influences of heredity, environment, and the use of psychoactive drugs.

DUAL DIAGNOSIS (CO-OCCURRING DISORDERS)
Co-occurring disorders are defined as the existence in one individual of a mental illness and an independent substance use disorder. A mental illness can be pre-existing or substance induced (temporary or permanent). Heavy methamphetamine use can induce a psychosis or a meth user could already have a pre-existing susceptibility to developing schizophrenia before they began using. Today there are fewer inpatient mental health treatment resources which has magnified the problem of co-occurring disorders. Those with mental/emotional problems often use drugs of abuse to self-medicate these problems.

Drug use can aggravate, amplify or mask a mental illness making an accurate diagnosis difficult. Any assessment must be a “rule-out” diagnosis: effects of abused drugs must be given time to dissipate before making a diagnosis. The mental health community and the substance abuse community are cooperating and both acknowledge the need to treat both conditions simultaneously and both support the “every door is the right door” strategy. However, there are too few full-service facilities to treat this population. The potential use of Minkoff’s Four-Quadrant Model to help resolve conflicts between substance abuse and mental health professionals in determining treatment interventions is examined. Evolving problems of multiple diagnoses (poly drug abuse, chronic medical disorders, HIV/HCV-HCB) are also examined.

This chapter reviews symptoms of the most common psychiatric disorders, the effects of the various mental illnesses and the connection between neurotransmitters, street drugs, and psychiatric drugs. Treatment approaches, in particular, the use of psychiatric medications, e.g., antidepressants, antipsychotics, lithium, and antianxiety drugs are discussed. Clinical treatments in group, individual and self-help groups are explored.
Chapter 10 - MENTAL HEALTH & DRUGS

Chapter Outline

MENTAL HEALTH & DRUGS

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   B. Classification of Substance-Related Disorders

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   A. Heredity & Mental Balance
   B. Environment & Mental Balance
   C. Psychoactive Drugs & Mental Balance

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VII. MENTAL HEALTH VS. SUBSTANCE ABUSE
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Chapter 10 – MENTAL HEALTH & DRUGS

Extended Outline

I. INTRODUCTION (PP. 10.2)

Of the 40 million Americans who experience any mental disorder such as schizophrenia, major depression, bipolar disorder, an anxiety disorder, or a personality disorder in the course of a year, 7 to 10 million also experience a substance-related disorder.

A. BRAIN CHEMISTRY (pp. 10.2–10.3)

Because the neurotransmitters affected by psychoactive drugs are also associated with mental illness, many people with mental problems are drawn to psychoactive drugs in an effort to rebalance their brain chemistry and control their agitation, depression, or other mental problems. The opposite is also true. Unbalanced chemistry due to drug abuse can aggravate a pre-existing mental illness or mimic the symptoms of one.

This connection between mental health and drug use can be seen in the similarity between the symptoms of psychiatric disorders and the direct effects of psychoactive drugs or their withdrawal symptoms. For example:

- cocaine or amphetamine intoxication mimics mania, anxiety, or psychosis;
- cocaine or amphetamine withdrawal looks like major depressive disorder or generalized anxiety disorder.

B. CLASSIFICATION OF SUBSTANCE-RELATED DISORDERS (p. 10.3)

Substance-related disorders are classified as mental disorders in the DSM-IV-TR, the Diagnostic and Statistical Manual of Mental Disorders. They are divided into two general categories:

1. **Substance use disorders (SUDs)** involve patterns of drug use and are divided into substance dependence and substance abuse.
   - **Substance dependence** is defined as a maladaptive pattern of substance use leading to clinically significant impairment or distress.
   - **Substance abuse** is defined as continued use despite adverse consequences.

2. **Substance-induced disorders** include conditions that are caused by the use of the specific substances. Disorders include intoxication, withdrawal, and certain mental disorders (e.g., delirium, dementia, psychotic disorder, etc.).

The DSM-V, to be released in 2013 defines SUDs as Addiction and Related Disorders and classifies each substance or compulsive behavior as its own specific class.
II. DETERMINING FACTORS (PP. 10.3-10.5)

The main factors that affect the central nervous system’s balance and, therefore a person’s susceptibility to mental illness as well as addiction are heredity, environment, and the use of psychoactive drugs.

A. HEREDITY & MENTAL BALANCE (p. 10.3–10.4)

Research has already shown a close link between heredity and schizophrenia, bipolar disorder, depression, and anxiety. If a child has a close relative who has schizophrenia, the risk of that child developing the disorder jumps 15- to 30-fold. The risk of developing depression or bipolar disorder is also greatly increased.

If a person’s genetically susceptible brain chemistry is stressed by a hostile environment and/or psychoactive drug use, that person has an increased likelihood of developing mental illness.

Genetic links for behavioral disorders, such as compulsive gambling, and attention-deficit disorder, have been found in twin surveys.

A high genetic susceptibility does not mean that that mental illness or addiction will occur, only that there is a greater chance that it will occur.

Excess dopamine is a key contributor to both real psychosis and drug-induced psychosis.

B. ENVIRONMENT & MENTAL BALANCE (pp. 10.4–10.5)

The same environmental factors that can induce a susceptibility to drug abuse can induce mental/emotional problems. The neurochemistry of people subject to extreme stress can be disrupted and unbalanced to a point where their reactions to normal situations are different from those of most other people. Abuse and sexual molestation can be major negative environmental factors.

C. PSYCHOACTIVE DRUGS & MENTAL BALANCE (p. 10.5)

If a nervous system is affected by enough psychoactive drugs, any individual could develop mental/emotional problems, but it is the predisposed brain that is more likely to have prolonged or permanent difficulties. The brain that is not predisposed is the one most likely to return to its normal functioning during abstinence.

The type of drug has a great impact on symptoms of co-occurring disorders. A brain predisposed to major depression can aggravate that mental problem by heavy abuse of alcohol and sedative-hypnotics or withdrawal from stimulant drugs. A brain predisposed to schizophrenia can be activated and a psychotic episode triggered by psychedelic abuse.
DUAL DIAGNOSIS (CO-OCCURRING DISORDERS)

III. DEFINITION (PP. 10.5–10.7)
A co-occurring disorder, is defined as the existence in an individual of at least one mental disorder along with an alcohol or drug use disorder.

Examples of pre-existing mental disorders are:
- thought disorders (psychotic disorders), such as schizophrenia;
- mood disorders (affective disorders), such as major depression and bipolar disorder
- anxiety disorders, such as panic disorders, obsessive-compulsive disorders, post-traumatic stress disorder, and ADHD (*attention-deficit/hyperactivity disorder).

Examples of substance-induced mental disorders are:
- stimulant-induced psychotic disorders
- alcohol-induced mood disorders
- marijuana-induced delirium.

There is a distinction between displaying the symptoms of mental illness and actually having a major psychiatric disorder. An evaluation of the severity and persistence of symptoms is necessary.

It is common for people who are abusing substances to present with symptoms of a personality disorder. As a person achieves and maintains sobriety, however, most symptoms of the personality disorder will often dissipate.

IV. EPIDEMIOLOGY (P. 10.7)
In one study, 37% of alcohol abusers and 53% of other substance abusers admitted for treatment had at least one serious mental illness in addition to their drug problem.

It is estimated that about 50% of individuals with severe mental disorders are affected by substance abuse. Of all people diagnosed with a mental illness 29% to 34% had a problem with either alcohol or other drugs.

Of the 7 million to 13 million people with co-occurring disorders, under 25% received only mental health care, 9% received only substance-abuse treatment, 8% received both, 60% received no treatment.

V. PATTERNS OF DUAL DIAGNOSIS (PP. 10.7–10.8)
The particular substance and how it is used determine two patterns of dual diagnosis.
A. PRE-EXISTING MENTAL ILLNESS (p. 10.7)
One type of dual diagnosis involves a person who has a clearly defined mental illness and uses drugs, often to self-medicate symptoms of the mental illness. Some mentally ill people have a concurrent substance-abuse problem that does not involve self-medication.

B. SUBSTANCE-INDUCED MENTAL ILLNESS (pp. 10.7–10.8)
Because of substance abuse and/or withdrawal, the user develops psychiatric problems because the toxic effects of the drug disrupt the brain chemistry. The chemical imbalance associated with this type of diagnosis is usually temporary, and the mental illness disappears with abstinence within a few weeks to a year. A significant number of these problems do manifest as unresolved and chronic mental illnesses.

VI. MAKING THE DIAGNOSIS (pp. 10.8–10.9)

A. ASSESSMENT (PP. 10.8–10.9)
The process for assessing mental illness in a substance abuser must be a “rule-out” diagnosis. This means that several possible diagnoses will be considered during the period of assessment. The prudent clinician addresses all symptoms but avoids making a specific psychiatric diagnosis until the drug abuser has had time to get clean/sober.

1. Reasons for Increased Diagnoses
- The reduction in the number of inpatient mental health facilities.
- The proliferation of substances of abuse, particularly stimulants.
- There are more licensed professionals with expertise
- Mental health workers are more aware of substance abuse and its effects
- Some clinicians are under pressure by managed care and diagnosis-related group payment structures to over diagnose mental illness in order to qualify for coverage.

For these reasons, a great number of people with psychiatric disorders have been forced to deal with their problems on their own or as an outpatient. One quarter of the homeless population suffers from pre-existing mental illness and of that group, 70% also suffer from substance dependence.

B. UNDERSTANDING THE DUAL-DIAGNOSIS PATIENT (p. 10.9)
In the past, dual diagnosis patients were often shuffled aimlessly between the mental health care system and the substance-abuse treatment system without receiving adequate care from either. Substance-abuse treatment facilities do not pro-actively seek these patients because they perceive them to disorganized and disruptive. Psychiatric
treatment centers also avoid these patients because they are perceived as substance abusers, disruptive, and manipulative.

**VII. MENTAL HEALTH VS. SUBSTANCE ABUSE (PP. 10.9–10.13)**

The following list comprises 12 differences between the mental health (MH) treatment community and the substance abuse (SA) treatment community.

1. **MH treatment providers:** “Control the underlying psychiatric problem, and the drug abuse will disappear.”
   SA treatment providers: “Get the patient clean-and-sober, and the mental health problems will resolve themselves.”

2. Partial recovery is more readily acceptable in MH than in SA programs.
3. Clients are more reluctant to seek help from the MH system than from SA treatment.
4. MH relies more on medication to treat the client, SA programs promote a drug-free philosophy or substitute a less-damaging drug such as methadone.
5. MH uses case management, shepherding clients from one service to another, SA programs emphasize self-reliance.
6. MH uses a supportive psychotherapeutic approach; some SA programs continue to use confrontation techniques.
7. Both systems are hampered from sharing information due to confidentially laws.
8. MH treatment teams are composed of professionally trained individuals: in some SA programs, recovering substance abusers make up the bulk of the treatment staff.
9. MH relies on scientifically based treatment approaches. SA programs often rely on the philosophy “what works for me will work for you.”
10. MH aims to prevent the client from getting worse. In the past, SA programs would allow people to hit bottom to break through their denial.
11. MH treatment is individualized, many traditional SA programs lean towards “one size fits all.”
12. MH and SA education during treatment are structured and knowledge based, SA education also places importance on long-held traditions and peer experiences.

Although the situation may be improving from the perspective of the MH treatment community, dual diagnosis represents a daunting challenge to the clinical expertise of the staff of SA programs.

Patients are often misdiagnosed with mental illness early in the treatment or assessment processes, they are then incorrectly referred to MH programs that all too often reject them because of their concurrent abuse problems.
A. RECOMMENDATIONS (pp. 10.11–10.12)

The dual-diagnosis patient must be treated for both disorders simultaneously. They are best treated in a single program when appropriate resources are available. SA programs must establish links with MH service providers and vice versa to provide both short-term and long-range services to address the problems of dual diagnosis. Research has found that intensive case management was associated with the greatest improvement in dual-diagnosis clients.

Dr. Kenneth Minkoff’s Four-Quadrant Model of differing levels of mental health and substance abuse is useful when determining the most appropriate treatment placement and direction for a dual-diagnosis client. The four quadrants are

Quadrant 1 - **Less** severe Mental Disorder (MD) and **Less** Severe Substance-Use Disorder (SUD)

Quadrant 2 - **More** severe (MD) and **Less** Severe (SUD)

Quadrant 3 – **Less** Severe (MD) but a **More** Severe (SUD)

Quadrant 4 – **More** Severe (MD) and **More** Severe (SUD)

<table>
<thead>
<tr>
<th>Q4</th>
<th>Q3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>Q2</td>
</tr>
</tbody>
</table>

B. MULTIPLE DIAGNOSES (p. 10.12–10.13)

Other combinations of diagnoses include:

- multiple drug (polydrug) abuse;
- other medical disorders such as chronic pain hepatitis, diabetes, and sexual dysfunction;
- triple diagnosis (dual diagnosis plus HIV disease).

When people are dually diagnosed, they must achieve sobriety from all drugs of abuse, and treatment must be linked to appropriate medical care. Dual-diagnosis patients are more likely to share needles, engage in prostitution, have sex with an IV drug user, and report being the victim of rape than those without a co-occurring disorder.

Hepatitis C and other severe liver diseases are frequently seen in chemically dependent patients, requiring the development of drug programs that are holistic, use several modalities, and are multidisciplinary.

VIII. PSYCHIATRIC DISORDERS (PP. 10.13–10.20)

Overall, about 21% of the U.S. population is affected by one or more mental disorders during a given year. Anxiety disorders are the most prevalent.
BRAIN DISORDERS IN AMERICANS (one-year prevalence)

<table>
<thead>
<tr>
<th>DIAGNOSIS</th>
<th>18-54</th>
<th>55 +</th>
<th>Adolescents</th>
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<tbody>
<tr>
<td>Schizophrenia</td>
<td>1.3%</td>
<td>0.6%</td>
<td>1.2%</td>
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<tr>
<td>Mood disorders</td>
<td>7.1%</td>
<td>4.4%</td>
<td>6.2%</td>
</tr>
<tr>
<td>bipolar disorder</td>
<td>(1.1%)</td>
<td>(0.2%)</td>
<td></td>
</tr>
<tr>
<td>major depression</td>
<td>(5.3%)</td>
<td>(3.7%)</td>
<td></td>
</tr>
<tr>
<td>Anxiety disorders</td>
<td>16.4%</td>
<td>11.4%</td>
<td>13.0%</td>
</tr>
<tr>
<td>Any brain disorder</td>
<td>21.0%</td>
<td>19.8%</td>
<td>20.9%</td>
</tr>
</tbody>
</table>

(a person might have multiple disorders)

A. PRE-EXISTING MENTAL DISORDERS (pp. 10.13–10.16)

1. Thought Disorder (schizophrenia)

Schizophrenia is a chronic psychotic illness that affects 0.5 to 1.5% of the population. It is believed to be inherited and is characterized by:

- hallucinations, delusions, inappropriate affect (illogical emotional response),
- difficulty connecting thoughts,
- impaired ability to care for oneself,
- a pronounced detachment from reality, disorganized speech, etc.

Schizophrenia usually strikes individuals in their late teens or early adulthood and can persist for life. It strikes men and women with equal frequency.

Several abused drugs mimic schizophrenia and psychosis. Methamphetamine, steroids, MDMA, and sometimes marijuana can induce a toxic psychosis, paranoia, or dissociation from reality as can withdrawal from downers.

2. Major Depressive Disorder

Almost 15% of Americans will experience a major depressive disorder in their lifetime, 6.7% in any one-year period. Major depression is characterized by depressed mood, diminished interest and pleasure in most activities, disturbances of sleep patterns and appetite, decreased ability to concentrate, feelings of worthlessness, and suicidal thoughts. These feelings must occur every day, for at least a week.

Excessive alcohol use, stimulant withdrawal, and the comedown or resolution phase of a psychedelic (LSD or ecstasy) could result in tempo temporary drug-induced depression.

3. Bipolar Affective Disorder

Bipolar affective disorder is characterized by alternating periods of depression, normalcy, and mania. If untreated, many bipolar patients attempt suicide during their depression phase. The mania is characterized by a persistently elevated, expansive, and irritated mood; inflated self-esteem or grandiosity; decreased need for sleep; a pressure to keep talking; a flight of ideas; and an
excessive involvement in pleasurable activities which have a high potential for painful consequences (e.g., drug abuse, gambling, or inappropriate sexual advances).

Median age of onset for bipolar affective disorder is in the twenties and affects men and women equally.

Toxic effects of stimulant or psychedelic abuse will often resemble a bipolar disorder. Users experience swings from mania to depression, depending on the phase of the drug’s action.

B. OTHER PSYCHIATRIC DISORDERS (pp. 10.16–10.19)

1. Anxiety Disorders

Anxiety disorders are the most common psychiatric disturbances seen in medical offices.

**Post–Traumatic Stress Disorder.** PTSD is a persistent re-experiencing of a traumatic event. One study estimated that a quarter of those in treatment for substance abuse might have PTSD.

**Panic Disorder** consists of recurrent unexpected panic attacks. A panic attack is a discreet period of intense fear or discomfort in the absence of real danger, accompanied by at least four of the following symptoms: palpitations, sweating, trembling or shaking, sensations of shortness of breath or smothering, feeling of choking, nausea or abdominal distress, etc.

Others anxiety disorders include:
- **agoraphobia,** fear of open spaces;
- **social phobia,** fear of being seen by others acting in a humiliating or embarrassing way;
- **simple phobia,** an irrational fear of a specific thing (spider) or place;
- **obsessive-compulsive disorder,** uncontrollable intrusive thoughts that lead to irresistible and often distressing actions.

**Generalized Anxiety Disorder (GAD),** unrealistic worry about several life situations that lasts for six months or longer.

Often anxiety and depression overlap. Many anxiety disorders are simply an outgrowth of depression.

Toxic effects of stimulant drugs and withdrawal from opioids, sedatives, and alcohol (downers) also cause symptoms similar to those described as anxiety disorders and can be easily misdiagnosed.

2. Dementias

These are problems of brain dysfunction (e.g., Alzheimer’s disease) brought on by physical changes in the brain caused by aging, disease, injury to the brain, or psychoactive drugs.

3. Developmental Disorders

These disorders include mental retardation, autism, communication disorders, and attention-deficit/hyperactivity disorders.
4. Somatoform Disorders
These disorders have physical symptoms without a known or discoverable physical cause and are likely to be psychological.

5. Personality Disorders
Disorders such as antisocial and borderline personality disorders are characterized by inflexible behavioral patterns that lead to substantial distress or functional impairment. Anger is intrinsic to personality disorders as are chronic feelings of unhappiness and alienation from others, conflicts with authority, and family discord. These disorders frequently coexist with substance abuse and are hard to treat.

Borderline personality disorder (BPD), frequently seen as a co-occurring disorder in the treatment of addiction, is a pervasive pattern of instability of interpersonal relationships and self-image and marked impulsivity. Symptoms include frantic efforts to avoid real or imagined abandonment, identity disturbance, and other symptoms.

6. Eating Disorders
Weak impulse control is often found in eating disorders and substance use disorders, a possible common etiology along with genetic factors for both conditions. Eating disorders often accompany major depression and PTSD.

7. Gambling Disorder
Pathological gambling, an impulse-control disorder, is more common in clients who abuse, or are dependent on alcohol. Often, a recovering alcoholic or addict will switch addictions and become as pathological about gambling.

8. Other Disorders
There are dozens of other mental disorders, including adjustment disorders, sleep disorders, sexual and gender identity disorders, etc.

C. SUBSTANCE-INDUCED MENTAL DISORDERS (pp. 10.18–10.20)
Among patients who suffer from these kinds of disorders, the majority of the mental health problems encountered are caused by the substance use rather than pre-existing conditions.

1. Alcohol-Induced Mental Illness
Impulse-Control Problems include but are not limited to violence, unsafe sex, high-risk behaviors, and suicide.

Sleep Disorders if induced by alcohol, can last for months after a person attains stable sobriety.

Anxiety. Symptoms of alcohol withdrawal anxiety include increased pulse rate, body temperature, and blood pressure as well as a variety of anxiety-like symptoms.

Depression. Studies indicate that up to 45% of alcoholics present with concurrent symptoms of major depressive disorder. After four weeks of sobriety only 6% of alcoholics report the persistence of depressive symptoms. The use of antidepressant medication is contraindicated in people who are heavy drinkers.
Psychosis is marked by the development of psychotic symptoms after many decades of heavy drinking.

Dementia. A patient with alcohol-induced dementia, even in its most severe form, can regain some cognitive functioning in sobriety, although the process may take up to a year.

Cognitive Impairment. Drug and alcohol abuse results in several regions of the brain becoming inactive. Decreased brain activity correlates to a high degree of cognitive impairments.

2. Stimulant-Induced Mental Illness

Impulse-Control Problems. Stimulant abusers also demonstrate impulse-control problems.

Stimulant-Induced Sexual Dysfunction. Initial use of cocaine or other strong stimulant often results in hyper sexuality accompanied by impulse-control problems.

Stimulant–Induced Mood Disorders. Abuse of stimulants can produce the symptoms associated with the acute manic phase of a bipolar disorder. If stimulant-use is the cause, symptoms disappear upon cessation of intoxication.

Mania. Manic-like symptoms caused by the use of stimulants will completely resolve upon cessation of intoxication.

Depression. Depression is caused by an imbalance of neurotransmitters. This imbalance can last up to 10 weeks after a person stops using. If the symptoms of depression are caused by stimulant withdrawal, antidepressants may help, but only during the initial detoxification phase of treatment.

Panic Disorder. The use of stimulants can induce a panic attack. The panic focus in the brain increases in size with each stimulant-induced panic attack. At a certain point, which is unique to the individual, a person can develop a chronic panic disorder even if they never use stimulants again.

Anxiety. Stimulant-induced anxiety disorders occur in the context of both acute intoxication and withdrawal.

Psychosis. Individuals who have psychotic symptoms will usually re-experience them each time they use; and as abuse continues, the duration of the effects will lengthen. It is common for people to experience psychotic symptoms for many months.

Stimulant-Induced Sleep Disorder. Stimulant addicts have been known to forgo sleep for several days and then crash when the drug runs out.

Cognitive Impairment. Stimulant abuse causes both transient and permanent damage to the brain and cognitive impairment.

3. Cannabis (marijuana)-Induced Mental Illness

The higher concentration of the active ingredient THC is thought to be responsible for the psychiatric syndromes noted in marijuana users.
Cannabis Intoxication Delirium involves difficulty with memory, multitasking, and other simple cognitive processes. It may take three months or longer for this delirium to clear after a person stops using marijuana.

Cannabis-Induced Psychotic Disorder involves paranoia along with auditory and visual hallucinations. These symptoms tend to be transient and occur only while the person is high. There are reports of hallucinogen persisting perceptual disorder (HPPD) with symptoms lasting several months.

Cannabis-Induced Anxiety Disorder. A panic attack in the intoxicated user.

Amotivational Syndrome. Does marijuana make a person amotivational, or do amotivational people tend to smoke marijuana? To date there are no good scientific studies.

4. Other Drug-Induced Mental Illnesses
The incidence of substance-induced psychiatric symptoms is much greater than the incidence of pre-existing psychiatric problems (and symptoms). Because many psycho-stimulants release serotonin, symptoms of serotonin syndrome should be considered when treating psychoses related to their use.

IX. TREATMENT (p. 10.21–10.23)
Treatment of mental illness and/or addiction is moving toward rebalancing brain chemistry.

A. REBALANCING BRAIN CHEMISTRY (p. 10.21–10.23)
1. Heredity & Treatment
As of yet we cannot alter a person’s genetic code, but a person can be made aware of how their heredity could put them at risk for a certain mental illness, drug addiction, or other compulsive behavior. Researchers hope someday to be able to identify the medication (and the treatment) that is most compatible with a person’s genetic profile.

2. Environment & Treatment
Even though heredity cannot be altered, environments can be changed and improved thereby altering brain chemistry to better handle both mental illness and drug abuse.

3. Psychoactive Drugs & Treatment
All substance-abuse treatment providers must familiarize themselves with the basics of psychopharmacology, as it is the cornerstone of mental health treatment.
The number of psychiatric medications (e.g., antidepressants, antipsychotics or neuroleptics, mood stabilizers, and antianxiety drugs) has increased.

4. Starting Treatment
Best practice currently is to stabilize both substance and mental health problems in an attempt to make the most accurate assessment possible.
5. Impaired Cognition
A study of dual-diagnosis clients at a public hospital found the majority were mildly-to-severely cognitively impaired and had difficulty participating in treatment. It may take weeks or months after detoxification for reasoning, memory, and thinking to come back to a point where the dual-diagnosis individual can fully engage in treatment.

6. Developmental Arrest
Drug abuse and mental illness often result in the arresting of emotional development. Many dual-diagnosis clients have character traits that are normal in children but abnormal in adults, making traditional treatment difficult. Some of them are

- a low frustration tolerance;
- an inability to work persistently for a goal;
- lying to avoid punishment;
- feeling hostile about dependency and testing limits constantly;
- expressing feelings as behaviors;
- shallowness of mood;
- fear of being rejected;
- having no hope or concept of the future;
- exhibiting denial;
- believing “Either you’re for me or against me.”

Treatment providers must appreciate where a person is in his or her developmental process and address treatment accordingly. These are problems of living, of living sober, and of living with the symptoms of mental illness. The best treatment will address all of the issues.

7. Psychotherapy, Individual Counseling & Group Therapy
Psychotherapy can be applied in either an individual or a group manner. Group therapy has become the standard for both substance abuse and mental illness treatments.

The therapist must be aware that the primary treatment of severe mental illness is psychopharmacology not psychotherapy, whereas the opposite may be true for treating substance use disorders.

Current thinking regarding the proper use of psychotherapy in substance use disorders sequences the following phases:

- achieving abstinence.
- maintaining abstinence after the patient has 6 to 24 months of sobriety.
- Once abstinence has been maintained, psychotherapy for the substance abuser is indistinguishable from any other psychodynamically oriented treatment.
Cognitive-behavioral therapies (CBTs) are the most frequently used evidence-based psychotherapies for all three phases of co-occurring disorder treatment.

**X. PSYCHOPHARMACOLOGY (PP. 10.23–10.31)**

The dual-diagnosis patient often needs medication for psychiatric disorders, such as antidepressants and mood stabilizers for mood disorders, antipsychotic (neuroleptic) medications for thought disorders, and antianxiety medications (anxiolytics) for anxiety disorders. These medications should be prescribed only after a thorough assessment.

Medications are used short-term, medium-term, or on a lifetime basis to rebalance the brain chemistry. Almost all medications affect the manner in which neurotransmitters work. They can

- **increase the presynaptic release** of neurotransmitters (methylphenidate);
- **block the neurotransmitter** from connecting with a given receptor site (antipsychotics);
- **inhibit the reuptake** of neurotransmitters (Selective serotonin reuptake inhibitors [SSRIs]);
- **inhibit the metabolism** of neurotransmitters (Nardil® and MAO inhibitors);
- **enhance the effect** of existing neurotransmitters (benzodiazepines).

In addition to manipulating brain chemistry, some drugs act directly to control symptoms. It is imperative to constantly monitor each patient’s reactions to a drug and adjust the dose accordingly.

**A. PSYCHIATRIC MEDICATIONS VS. STREET DRUGS (pp. 10.24–10.25)**

One advantage physician-prescribed psychiatric medications have over street drugs is, except for the benzodiazepines and stimulants, that they are not addicting. Treating anxiety, depression, and other mental problems through psychiatric medications can relieve many of the reasons and the triggers for drug abuse.

When a patient uses street drugs, he or she falsely believes they have control over which drugs they ingest, inject, or otherwise self-administer. The same patients, when receiving medication from a doctor, often express the belief that they are not in control of their lives. Thus, many rely on street drugs rather than on psychiatric medications. It is the physician’s role to work with the patient regarding all issues raised by the use of prescription medications.

**B. DRUGS USED TO TREAT DEPRESSION (pp. 10.25–10.27)**

Many in the psychiatric field believe that depression is caused by an abnormality in the production of the serotonin and norepinephrine. Antidepressants are usually meant to increase the amount of serotonin or norepinephrine available.
1. Selective Serotonin Reuptake Inhibitors (SSRIs)

Fluoxetine, sertraline (Zoloft®), citalopram (Celexa®), paroxetine (Paxil®), and fluvoxamine (Luvox®) are classified as SSRIs; they increase the amount of serotonin available to the nervous system. It generally takes two to four weeks for the full effects to be sensed. Most of the side effects are mild and dissipate in a few weeks.

Using too many SSRIs, especially MDMA or other antidepressants, can induce serotonin syndrome. Caused by excess serotonin, the symptoms include elevated body temperature, shivering and tremors, mental changes, rigidity, autonomic nervous system instability, and occasionally death.

Similar medications include serotonin-norepinephrine reuptake inhibitors (SNRIs) (e.g., venlafaxine [Effexor®] and duloxetine [Cymbalta®]), selective norepinephrine-dopamine reuptake inhibitors (NDRIs) include bupropion (Wellbutrin® and Zyban®); selective norepinephrine reuptake inhibitors (NRIs) include reboxetine (Edronax® and Vestra®).

2. Tricyclic Antidepressants

Tricyclic antidepressants were once the primary medications used to treat depression but over the past 15 years the newer antidepressants have proved to have fewer toxic and side effects. Tricyclic antidepressants, such as imipramine and desipramine, block reabsorption of serotonin and norepinephrine by the sending neuron, thereby increasing the activity of those biochemicals. It usually takes two to six weeks for a patient to respond to drug therapy.

3. Monoamine Oxidase (MAO) Inhibitors

These very strong drugs work by blocking an enzyme (monoamine oxidase) that metabolizes the neurotransmitters norepinephrine and serotonin. This, in essence, raises the level of these neurotransmitters.

4. Stimulants

Amphetamine or amphetamine congeners (e.g., Dexedrine,® Ritalin,® and Cylert®) were once used to treat depression. However, tolerance developed rapidly and the mood lift proved to be too alluring so misuse and addiction developed quickly. Psychiatrists now prescribe nonstimulant medication.

C. DRUGS USED TO TREAT BIPOLAR DISORDER (p. 10.27–10.28)

Lithium is the primary drug used to treat bipolar disorder. Other medications include carbamazepine (Tegretol®), valproic acid (Depakene®), divalproex sodium (Depakote® oxcarbazepine (Trileptal®), gabapentin (Neurontin®), and topiramate (Topamax®). All of these are used as mood stabilizers even though some were initially developed for other purposes.

1. Lithium

Lithium is a naturally occurring mineral that helps stabilize both the highs and the lows of bipolar disorder. A patient can expect to see clinical improvement two weeks after initiation of the medication. The use of street drugs and alcohol is contraindicated in patients taking lithium.
D. DRUGS USED TO TREAT PSYCHOSES (Antipsychotics or neuroleptics) (pp. 10.28–10.29)

In the early 1950s, a new class of drugs, phenothiazines, was found to be effective in controlling the symptoms of schizophrenia, such as chlorpromazine (Thorazine®), thioridazine (Mellaril®), and prochlorperazine (Compazine®).

Newer antipsychotics—nonphenothiazines like haloperidol (Haldol®), risperidone (Risperdal®), olanzapine (Zyprexa®), clozapine (Clozaril®), loxapine (Loxitane®), and molindone (Moban®)—block the effects of dopamine.

New antipsychotics include aripiprazole (Abilify®), a dopamine system stabilizer and paliperidone (Invega®). Lurasidone (Latuda), iloperidone (Fanapt), and asenapine (Saphris) block dopamine and serotonin receptors.

Researchers found that an excess of dopamine is one of the major causes of psychotic symptoms in schizophrenia. Most of the antipsychotic medications work by blocking the dopamine receptors in the brain, thereby inhibiting the effects of the excess dopamine. Blocking dopamine commonly creates symptoms such as involuntary movement and the inability to sit still.

Another commonly encountered side effect of antipsychotic medications is sedation; patients may seem drugged.

There is a trend toward using atypical antipsychotics such as risperidone (Risperdol®) for the acutely psychotic patient. Because the antipsychotic drugs do not have an immediate impact on the patient’s psychotic symptom, it may be several weeks before the patient experiences the full antipsychotic effect.

Clozapine (Clozaril®) is usually effective in the 30% of patients who do not respond to standard antipsychotic drug therapy.

More than 33.5 million prescriptions were written for antipsychotic medications in the United States in 2001, up 34% from the previous two years. Even more dramatic is the six-fold increase in the number of children taking antipsychotics.

Patients with a pre-existing psychotic illness such as schizophrenia or schizoaffective disorder often self medicate with street drugs in an attempt to control their symptoms.

E. DRUGS USED TO TREAT ANXIETY DISORDERS (p. 10.29)

For generalized anxiety disorder and some of the other anxiety disorders, the benzodiazepines are widely used. They act very quickly, particularly Valium®. The calming effects are apparent within 30 minutes. Many physicians avoid prescribing any benzodiazepine on a chronic basis because they are habit forming, even at clinical doses, and have dangerous withdrawal symptoms. Other non-addicting drugs for anxiety include BuSpar® and the beta-blockers. SSRI antidepressants such as Paxil® have been approved for use in anxiety disorder.

Buspirone (BuSpar®) is a serotonin modulator that blocks the transmission of excess serotonin. It has the advantage of minimal side effects and there is no evidence that the drug is habit forming.
1. Drugs for Obsessive-Compulsive Disorder
Obsessive-compulsive disorder (OCD) has been treated with almost every type of psychotropic medication, usually with poor results.

2. Drugs for Panic Disorder
Several drugs are used to control panic attacks and panic disorder. SSRI antidepressant medications are recommended due to their favorable side-effect profile. Other frequently used medications in the treatment of panic are the beta-blockers like propranolol. Some of these drugs can have serious cardiac side effects.

F. COMPLIANCE & FEEDBACK (p. 10.31)
The most challenging issue for any physician is improving patient compliance with the physician’s instructions for taking a prescribed medication - psychiatric or otherwise. If patients do not experience the desired effects, they will often alter the dosage on their own, stop taking the medication, or combine it with other drugs, causing dangerous interactions. Feedback is important, the physician and the client must work in tandem for the greatest success.
Chapter 10 - MENTAL HEALTH & DRUGS

Classroom or Small Group Discussion Topics

1. List the thoughts and behaviors associated with anxiety and have students map the range of thoughts and behaviors associated anxiety ranging from pressure and anxieties of everyday life to conditions that require treatment.

2. Discuss nondrug ways (e.g. behaviors) people rebalance themselves when they are depressed or anxious (e.g. exercise, meditation).

3. Discuss the statement “A family is ruled by its sickest member.”, Have the class discuss the likely effects that someone with mental health problems or an addiction will have on a family.

   What can a family do to minimize the impact a family member with an addiction or mental health problem may have on a family so that life does not revolve around its sickest member.

4. Break students into groups of 4. Assign half the groups the task of generating a list of symptoms associated with mental illnesses covered in chapter 10. Have the other half generate a list of drug-induced or withdrawal-induced psychological and behavioral symptoms. As a class - match symptoms that occur on both the list of mental illnesses and drug-induced or withdrawal-induced symptoms.

5. How should the mental health community and the chemical dependency community work together to treating a client with co-occurring disorders.

6. What are the advantages and disadvantages of individual counseling, of group counseling?

7. Ask students to comment on the stressors in their environment that have or could make them act irrationally.

8. Should the mental health communities’ reliance on medication therapy become the preferred treatment in chemical dependency? Why? Why not?

9. Discuss the scientific evidence that support the use of prescription drugs to treat and rebalance brain chemistry. What is the philosophical or moral opposition to the use of drugs to treat and rebalance chemistry?
Chapter 10 - MENTAL HEALTH & DRUGS

Critical Thinking & Class Exercises

1. Ask students to discuss why males tend to be more reluctant to use mental health treatment and females more reluctant to use chemical dependency treatment. What personal and social factors might be involved?

2. Ask students to debate the relative merits of mental health and substance abuse treatment procedures for dually diagnosed individuals.

3. Break the students into groups of 4 and ask them to develop the type of treatment program they would ideally want to have for themselves if they were struggling with bipolar disorder in addition to a substance abuse disorder for alcohol and cocaine.

4. Ask students to research the anti-anxiety drug Prozac and discuss the promises and potentially negative effects for dually diagnosed patients.

5. Have the students attend an open 12-step meeting of Alcoholics Anonymous or Overeaters Anonymous and then have them discuss their experiences always remembering the guiding principle of anonymity.