



The Counseling & Social Work Superstore

"MEDICATIONS AND MENTAL ILLNESS"

This .pdf document contains the course materials you must read.

Simply keep scrolling down and read every page. To receive CEU credit after reading this file, please follow the directions at the end of the course.

Peachtree is approved to provide continuing education services by the National Association of Alcohol and Drug Addiction Counselors (NAADAC) and the National Board of Certified Counselors (NBCC), as well as by many individual state regulatory boards for most mental health related professionals, including:

NAADAC # 205

California BBS PCE #1852

Texas LMFT #181

Texas SW #CS1048

Kansas KBSRB #03-001

NBCC # 5701

California Nursing #14780

Texas LPC #444

Florida SW, MHC, MFT BAP #723

Oklahoma SW CEP #2011-0001

Please see www.fastceus.com/approvals.php for a complete state-by-state and discipline listing of all our Board CEU Provider Approvals, or contact your Board directly if you have course credit approval questions.

We Have What You Need

FastCEUs.com

**PeachTree
Professional
Education, Inc.**

**PeachTree Professional Education, Inc.
Richard K. Nongard, LMFT/CCH
15560 N. Frank L. Wright Blvd, #B4-118
Scottsdale, AZ 85260**

Voice: (800) 390-9536

Fax: (888) 877-6020

www.FastCEUs.com

MEDICATIONS AND MENTAL ILLNESS

3 CEU Credit Hours

All materials copyright © Richard K. Nongard. All rights reserved.

No portion of this course may be reproduced without specific written consent of the author.

Course Description:

An excellent overview of psychotropic medications, classifications and uses.

FLORIDA: *We do NOT offer the Florida Board required "Medical Errors" course.*

This course is approved for General CE credit in Florida - but not for "Medical Errors."

Course Objectives:

At the conclusion of this course the professional will be able to:

- 1.) Understand the different psychotropic medications known to be prescribed for various mental health conditions
- 2.) Discuss potential benefits, side-effects and protocols for medicating substance abusers, pregnant women and children
- 3.) Explore concepts of over-medication and alternative therapies to medication

Purpose of this course:

The purpose of this course is to provide the mental health professional with an overview of the uses of medications in emotional and behavioral health treatment.

Course Outline:

Part 1: Course organization, Documentation and Introduction.

Part 2: Reading of the accompanying materials and discussion.

Part 3: Understand the application of the course materials towards professional practice.

Part 4: Administration and Completion of the Evaluation of Learning Quiz

=====

3 Clock Hours / CE Credits



Your instructor is **Richard K. Nongard**,
a Licensed Marriage and Family Therapist,
Certified Clinical Hypnotherapist
and a Certified Personal Fitness Trainer.

PeachTree Professional Education, Inc.
15560 N. Frank L. Wright Blvd, #B4-118
Scottsdale, AZ 85260

Voice: (800) 390-9536
Fax: (888) 877-6020
www.FastCEUs.com

MEDICATIONS AND MENTAL ILLNESS

INTRODUCTION

I consider myself to be a fortunate mental health professional. My first experiences in this field did not come in outpatient therapy working with the well-but-unhappy person or in a social service outreach program, but on an old-time inpatient psych ward, complete with blue-haired nurses and psychiatrists almost as old as Freud himself. I worked as a psych-tech while finishing my degree, and I was only hired for one reason: to provide 'male-presence' on the second shift.

The traditional approach to treating clients on this unit was to provide one hour of group therapy per day (led by one overworked social worker) and to medicate them, and allow them to sleep and play dominoes the rest of the time. It was not the best psychiatric care available, but as a 21-year-old psych-tech with a lot of psychology courses behind me, it was the ideal learning environment.

To this point, I had been trained only in school to provide counseling. I learned that when people were depressed, you embarked on a course of intervention using cognitive-behavioral therapy. I learned that when a psychotic individual was in counseling, the foundation of the therapeutic relationship, trust, would be harder to build.

And then I went to work where, when a client complained of depression, the nurse called the doctor who "upped" the dose of medication, and then they went back to playing cards with the other patients. At work, a psychotic patient never learned trust. Instead, they were simply given antipsychotic medications, with the famous cogentin "orange cocktail" as a chaser, to prevent extra-pyrimidical side effects.

What I was learning in school obviously seemed to be at odds with what I was observing at work. This confusion led me to learn a great deal as I began to sort out all the issues.

Over the years I have learned a lot about mentally ill patients, and the use of medications, and have come to some conclusions that are the basis for this course:

➡ Psychotropics can have a profound ability to impact client functioning; but at the same time, I have never yet seen a psychotropic medication 'cure' a client.

- The severely mentally-ill substance abuser probably won't stay sober without medication management of the mental-illness. This is not "prescription drug abuse" - this is the correct course of action to assist the severely mentally ill substance abuser.
- We are in the stone-age of understanding and using psychotropics.
- Even though therapists don't prescribe medications, we treat clients who take medications, and that means we must understand medications, dosages and side-effects.
- Clients are often overmedicated or inappropriately medicated.
- Even though doctors prescribe, front line caregivers such as therapists are often looked to for medication education.
- Children can be medicated, and for some this is good, but most problems in children are not due to a medication deficiency.
- Many mental health professionals leave it to nurses (and physicians) to handle and take care of all medication issues.

I am convinced that even though medication should be the responsibility of other caregivers, the responsibility for many tasks related to medications will actually fall into our hands. As a result, we must understand the nature of psychiatric medications, the limits of psychiatric medications and the correct use of psychiatric medications.

Trying to provide psychotherapy to a client that is mis-medicated or noncompliant in their medications, can be as frustrating as trying to provide therapy to an alcoholic that isn't sober. Hearing a child's parent ask if there is a medication that can make Johnny "act right" - during the stress of an adversarial court battle over the children - is extremely frustrating. Having to work with the client whose physician is prescribing ineffective or outdated medications can be frustrating. And all of these issues are the kind that therapists have to deal with on a regular basis.

Having the basic knowledge of drug names, common side effects, typical dosages of common prescription can be a valuable aid to any therapist. It not only help us to understand the client's scope of illness and treatment, but also to provide education and to identify treatment goals and strategies surrounding client compliance and responsibility.

Having knowledge of medications and their effects can help us to inform physicians of appropriate intervention strategies and perhaps avoid medication errors such as prescribing Desyryl to a 24 year old male client (which may be appropriate depending on the client, but also risky considering the potential side effects in the male reproductive system – the penis in particular.)

This is not a comprehensive psychopharmacology course, (which could not be completed in three hours via home study). Nevertheless, it should provide the clinician with a guide to understanding basic classifications, uses and side effects of common medications. Hopefully, it will also encourage the professional to take a more active role in understanding the medications and issues surrounding them that impact your clients.

I want to encourage the reader of this course to do some of the things I have done to improve your knowledge of medications. None of them are particularly profound—but they can have profound impacts on the care we provide to our clients.

For example:

➡ Buy a PDR (Physician’s Desk Reference). Each and every time a client lists a drug on the intake evaluation that I am unfamiliar with, I flip to the PDR and “read all about it”. If you *religiously* look up the medications your clients are taking, even if there are no ‘issues’ with the medication, you will become extremely knowledgeable—and knowledge is good.

➡ Use the resources of the internet to learn about medications and their uses. A great free website for this information is <http://medlineplus.gov>

➡ Take the time to ask clients about their medications and the way they use them. It is amazing how many clients only take Prozac when they ‘feel depressed’ - even though it is prescribed to be taken on a daily basis. And the number of clients who are irregular in taking dosages of Paxil and then try to “make it up” the following day with an “extra hit”.

➡ A little patient education on how the chemicals work can go a long way towards helping a client actually benefit from a drug.

(For example: Prozac works by maintaining a therapeutic dose, and Paxil has a very short ½ life making ‘make-up’ dosages ineffective, probably leading to destabilization of the symptoms being treated.)

➡ Ask about the use of alcohol or other drugs used regularly or infrequently in conjunction with psychotropics. It is simply best for any patient on a psychotropic of any kind to avoid all mood altering substances. Alcohol is a depressant, and even a client who does not abuse alcohol can mitigate the effects of an anti-depressant even with responsible alcohol use.

➡ Nicotine and Caffeine can have impact on psychotropics, so do not fail to evaluate for these substances and consider their effects when treating a client on psychotropics.

Again, none of this is profound, but when we are busy managing 20 other cases, creating treatment plans and dealing with managed care, the basics of medication related issues can slip by or easily be left to the other professionals - even though the impact on our work can be profound.

SECTION ONE

ONE

PSYCHOTROPICS CAN HAVE
A PROFOUND ABILITY
TO IMPACT CLIENT FUNCTIONING;
BUT AT THE SAME TIME
I HAVE NEVER YET SEEN
A PSYCHOTROPIC
CURE A CLIENT.

**Psychotropic
medications**

are

like

Aspirin

—

They

are

designed

to

alleviate

or

minimize

symptoms

—

Not

to

cure

an

illness.

It is important to point out that even though modern psychiatry wants society to believe that we are nothing more than the “sum total of our serotonin and dopamine receptors” and that all problematic behavior is caused by a “chemical imbalance in the brain”, human biology actually plays a *small* role in determining mental-illness.

Behavior is also impacted by an individual’s psychological resources and coping strategies, social opportunity and realization of spiritual needs.

I have certainly never been against the use of medications, and have seen some profound results, but I have never seen a medication cure someone yet.

I have never seen an anxiety disordered client become un-anxiety disordered, or a depressed client become happy — as a result of medication interventions alone.

I am also a believer that no matter what your biology, the forces of psychology, social interaction and human fulfillment drive our behaviors to a greater extend than biology.

Take my friend Lee for example. From a biological perspective, Lee is a sitting duck for alcoholism. Both of his parents are alcoholics, and all six of his siblings are addicted to alcohol or other drugs. And while Alcoholism runs on both sides of his family for generations, Lee is not an alcoholic and never will be. Why? Even though genetically he probably has all of the markings of alcoholism, he is not nor will ever be an alcoholic because at 50 years of age *he has never once put alcohol or any other mood altering substance in his body!*

Somehow, in his youth he recognized the dysfunction in his family and made a (psychological) decision to meet his needs (spiritual) apart from drugs or alcohol. So now at age 50, even though he is probably “biologically predisposed” to addiction, this predisposition has had no impact on him.

It is important to understand the limits of pharmacology and to recognize that humans are comprised of much more than the sum total of their biology.

This fundamental truth, (that psychotropics don’t cure), is a disappointment to patients looking for easy answers, managed care companies looking to trim costs, and clients who would rather keep doing the old thing without consequences, but it is a fact.

I am always frustrated by the clinician who buys into the lie of the pharmaceutical industry that “a cure can come from a pill”, because it simply can’t. Understanding this limitation allows the responsible clinician to effectively incorporate medication management into good therapy.

TWO

THE SEVERELY MENTALLY-ILL
SUBSTANCE ABUSER
PROBABLY WON'T STAY SOBER
WITHOUT MEDICATION MANAGEMENT
OF THE MENTAL-ILLNESS.

**Of course
precautions
should
be
taken,

but
it is
appropriate
and
perhaps
necessary
to
treat
the
co-existing
mental
illness
of
an
addicted
client
with
medications,

if
we are
to
expect
recovery.**

THIS IS NOT
“PRESCRIPTION DRUG ABUSE” –
THIS IS THE CORRECT COURSE
OF ACTION TO ASSIST
THE SEVERELY MENTALLY ILL
SUBSTANCE ABUSER.

After my work in the old-time psych unit, I immediately finished school and took a job as a counselor with an old-time drug and alcohol treatment program. It was a 28-day inpatient-only treatment program, complete with Jellinek’s chart on the wall and an orange vinyl pit-group and plastic ashtrays for group therapy.

The Family Practice physician who directed this program understood the 12-steps and the recovery process, and made certain that medications were ONLY used for detoxification and insisted that any client requesting medication for any other problem following detoxification was merely “med seeking.”

The philosophy of the unit was simple: Because of the concept of cross addiction, *any medication or drug ingested would immediately lead to relapse.*

When this program hired a couple of psychiatrists (with no background in chemical dependency counseling) in an effort to increase census on the money losing 28-day program, all hell broke loose. One day I actually thought there was going to be a fist-fight between one of the psychiatrists and the Family Practice doc.

The psychiatrist admitted a chronic major depressive client who had been abusing cocaine, and proceeded to prescribe a common antidepressant. The Family Practice doc and the program administrator nearly had a heart attack over the issue.

But it made sense to me. Clearly the cocaine use was addictive behavior, but it was also an attempt at self-medication. And the truly mentally ill substance abuser will probably not stay clean long enough to derive benefits from sobriety - without effective medication.

Take the typical schizophrenic client. They are known for their substance dependency, but if the thoughts that are disordered are not managed by medication, the orderly thought of the 12-step program will probably be forgotten by step 2.

**Much
substance
use**

**(and
subsequent
addiction)**

**arises
from
the
client's
perceived
need
to
self-
medicate
their
mental
illness.**

THREE**WE ARE IN THE STONE-AGE
OF UNDERSTANDING
AND USING PSYCHOTROPICS.**

**Great
advances
have
been
made
in
the
last
50
years
towards
understanding
mental
illness
and
managing
it
with
medications

but
there
is
still
a
long
way
to
go.**

- Thomas Edison invented the Phonograph in **1877**.
- "Every week, almost every day, brings its new drug, each in turn praised as being the greatest discovery of modern therapeutics", said one physician in **1889**.
- The first organized auto race was in **1895**.
- Aspirin was released by Friedrich Bayer & Co. in **1899**.
- The cause of Yellow Fever was discovered in **1900**.
- Charles Lindbergh flew from New York to Paris in **1927**.
- The DSM-I, the original manual published by the American Psychiatric Association to set forth diagnostic criteria, descriptions and other information to guide the classification and diagnosis of mental disorders was published in **1952**.
- The DSM-II replaced the DSM-I in **1968**.
- The DSM-III, the first edition to incorporate multi-axial classification, replaced the DSM-II in **1980**.
- It was replaced by the DSM-III-R in **1987**.
- The DSM-IV replaced the DSM-III-R in **1994**.
- In **2000**, the DSM-IV-TR replaced the DSM-IV, by incorporating changes from the DSM-IV in diagnostic criteria for the following:
 - Tourette's Disorder
 - Dementia of the Alzheimer's Type; Dementia Due to Other General Medical Conditions
 - Personality Change Due to a General Medical Condition
 - Exhibitionism; Frotteurism; Pedophilia; Sexual Sadism; Voyeurism

➡ **The first psychotropic medications were introduced only about 55 years ago.**

Science has certainly made headway, but we must understand that psychotropics are in many cases still evolving. Therefore, the mechanisms that explain the efficacy of them is often unknown.

What this means to the patient and the clinician is that finding the right medication is often an art, rather than a science. Unfortunately, this also means that ups and downs in treatment are to be expected, as the process of "trial and error" continues.

FOUR

**EVEN THOUGH THERAPISTS
DON'T PRESCRIBE MEDICATIONS,
WE TREAT CLIENTS
WHO TAKE MEDICATIONS,
AND THAT MEANS
WE MUST UNDERSTAND MEDICATIONS,
DOSAGES AND SIDE-EFFECTS.**

The physicians I have worked with, even the good ones, typically spend less than 20 minutes a day with their clients. They are doctors, not therapists or counselors.

**As
therapists
and
counselors,**

**we
are
the
ones
that
clients
will
come
to
with
medication
questions
and
concerns.**

In most settings, the therapist typically spends anywhere from a couple of hours to all day with a client, and usually on a much more informal basis.

This means that clients will come to us - not the nurses or the doctors - to ask questions.

If we have the correct answers, it can make all the difference in the world. If we do not have the correct answers, time delay, confusion, mistrust and frustration will likely occur.

Since we spend so much time with clients, we are often the ones capable of observing medication side effects that other caregivers might miss or that clients themselves fail to recognize.

Having medication knowledge also means that we can spot potential errors in dosages, or even with the actual medication prescribed, and bring the information to the attention of those who are empowered to make changes.

FIVE**CLIENTS ARE OFTEN
OVERMEDICATED OR
INAPPROPRIATELY MEDICATED.**

At this point, I realize I am sounding cynical of our colleagues in nursing and medicine. This is not my intention. They are well trained and caring, but their job function is different than ours, and the way they observe clients is different than ours.

**Understanding
psychotropic
medications
allows
us
to
more
easily
recognize
if
our
clients
are
taking
inappropriately
prescribed
dosages,
or
even
inappropriate
medications.**

Also, the pressures from family, managed care, administration etc., all lead to a “fix it now” mentality. Therefore, when the doctor prescribes, it *appears* as if somebody is actually doing something now! But this appearance can be misleading.

Doctors often prescribe the medications they are most familiar with, rather than the medication most effective for the individual client. (This is not a problem unique to medicine—the electrician always looks to diagnosis the problem in the way they are most familiar, and the therapist uses the modality of treatment they are most familiar with.) But because someone is most comfortable or familiar with an intervention does not mean it is best.

The responsible clinician recognizes that patient autonomy is a treatment goal, and functioning with the least amount of any intervention is a healthy principle used to guide therapy. That said, it is our responsibility to bring medication issues to the attention of the treatment team or attending physician. However, this also means we need to develop ‘political tact and diplomacy’ in interacting with our colleagues. Since we are *not* physicians it is clearly not our role to discuss with clients any specific errors, but instead we are to interact as professionals with the other professionals caring for our clients.

Start telling clients that their doctor screwed up, and you probably open yourself to liability (especially if you’re wrong) and to the political wrath of other caregivers. Start to inform with concern, ask questions and be part of the decision making process, and we are likely to benefit our clients and learn something new.

SIX

EVENT THOUGH
DOCTORS PRESCRIBE,
FRONT LINE CAREGIVERS
SUCH AS THERAPISTS
ARE OFTEN LOOKED TO
FOR MEDICATION EDUCATION

**The
more
we
know
about
psychotropic
medications,**

**the
more
helpful
we
can
be
to
our
clients
when
they
have
questions
or
concerns.**

We can go a long way in assisting our clients in recovery from mental illness when we can answer common questions and suggest ideas to help them maximize benefits, recognize symptoms and learn about their medications.

While often there is no other choice, let it be known that a confused, frustrated or scared client trying to reach their doctor –via the receptionist or nurse on the phone—to discuss their medication concerns (because they don't have a check-up appointment scheduled for another 2 months) may not be able to express their questions or worries adequately enough to convey the important information the doctor needs to make appropriate changes.

We are the professionals that interact with the client most frequently. We are the ones who observe them physically and emotionally, and thus we need to understand their questions and concerns regarding the efficacy and side effects of their medications.

- **The easiest way to learn: Read the PDR.**
After all, it's how the doctor learned.

SEVEN

CHILDREN CAN BE MEDICATED,
AND FOR SOME THIS IS GOOD,
BUT MOST PROBLEMS
IN CHILDREN
ARE NOT DUE TO A
MEDICATION DEFICIENCY

**Children's
behavioral
problems
are
often
a
product
of
their
environment,

rather
than
a
chemical
deficiency
in
their
brain.**

I have always said, "*Attention deficit disorder is not caused by a Ritalin deficiency*". No doubt some children are mentally ill, but as we consider etiology and treatment of mental health problems, we must consider factors beyond biology and realize that a biological intervention does not fix a social problem.

I have picked ADD/ADHD here as an example of a childhood disorder treated frequently with medications. Although I do believe *some* children probably will respond to a biological intervention (because a biological problem does exist), I personally do not believe this is the case with the majority of children.

Because psychotropics are extremely powerful chemicals with the potential for damage to the brain they are designed to treat, they should be used *only* after careful evaluations and assessment.

Consider, what else could cause the symptoms of ADD/ADHD?

- ➡ A culture that is programmed for a commercial every 7.5 minutes?
- ➡ How about simply a *lack of attention*? A true "attention deficiency" from busy parents or educators
- ➡ Peer pressure to develop an identity
- ➡ Avoidance of responsibility
- ➡ It's fun to have attention
- ➡ Disassociation (in the simple context, not the clinical context)

☞ The task or subject is honestly boring

☞ The task or subject is simply too easy

All of these things could contribute to the behaviors labeled ADD/ADHD, and yet medication won't make a boring class more interesting or a self-absorbed or overworked parent pay attention to a child.

**Treating
a
child's
behavioral
problems
with
medications
should
be
done
with
great
care,
and
only
as
a
last
resort.**

Today's classes are not yesterday's classes, and this generation *will* create a commercial break (behaviorally) if the teacher does not create one.

Use of medication in children *can* be effective in certain instances, but should be carefully observed and approached conservatively as a *last* intervention, rather than a first line intervention.

When medications don't prove effective, it's time to discontinue that form of intervention, since clearly the risks outweigh any minimal benefit.

SECTION TWO

Most of the following information has been adapted from the December 2001 guidelines on psychiatric medication issued by the National Institute of Mental Health. It really is a great guide and resource for mental health professionals, and can provide a basic understanding of many client medications.

What follows is an overview of drug classifications and their uses. Please refer to the manufacturer information or the PDR for complete details on specific medications.

Special Message

This information is designed to help people understand how and why drugs can be used as part of the treatment of mental health problems.

It is important for persons who provide mental health services to be well informed about medications for mental illnesses, but this information is not a "do-it-yourself" manual.

Medication taken improperly can be dangerous, and only a licensed physician may make prescribing decisions.

Interpretation of both signs and symptoms of the illness and side effects are jobs for the professional.

The prescription and management of medication, in all cases, must be done by a responsible physician working closely with the patient and sometimes the patient's family or other mental health professionals.

This is the only way to ensure that the most effective use of medication is achieved with minimum risk of side effects or complications.

This information is provided as educational material only, and is to assist the mental health professional in understanding clients using psychotropic medications.

ONE

Oftentimes an individual is taking more than one medication, and at different times of the day.

It is essential to take the correct dosage of each medication.

➡ **An easy way to ensure this is to use a 7-day pill box, available at the prescription counter in any pharmacy, and to fill the box with the proper medications at the beginning of each week.**

Anyone can develop a mental illness – you, a family member, a friend, or the fellow down the block. Some disorders are mild, while others are serious and long-lasting. These conditions can be helped.

One important way is with psychotherapeutic medications. Compared to other types of treatment, these medications are relative newcomers in the fight against mental illness.

It was only in 1950 that the first one, **chlorpromazine**, was introduced.

But considering the short time they've been around, psychotherapeutic medications have made dramatic changes in the treatment of mental disorders. People who, years ago, might have spent many years in mental hospitals because of crippling mental illness may now only go in for brief treatment, or might receive all their treatment at an outpatient clinic.

Psychotherapeutic medications may also make other kinds of treatment more effective.

Someone who is too depressed to talk, for instance, can't get much benefit from psychotherapy or counseling; but often, the right medication will improve symptoms so that the person can respond better.

TWO

Another benefit from these medications is an increased understanding of the causes of mental illness.

➡ Scientists have learned a great deal more about the workings of the brain as a result of their investigations into how psychotherapeutic medications relieve disorders such as psychosis, depression, anxiety, obsessive compulsive disorder, and panic disorder.

Symptom Relief, Not Cure

Just as aspirin can reduce a fever without clearing up the infection that causes it, psychotherapeutic medications act by controlling symptoms. Like most drugs used in medicine, they correct or compensate for some malfunction in the body.

Psychotherapeutic medications do not cure mental illness, but they do lessen its burden.

In many cases, these medications can help a person get on with life despite some continuing mental pain and difficulty coping with problems.

For example, drugs like chlorpromazine can turn off the "voices" heard by some people with schizophrenia and help them to perceive reality more accurately, and antidepressants can lift the dark, heavy moods of depression.

The degree of response ranging from little relief of symptoms to complete remission depends on a variety of factors related to the individual and the particular disorder being treated.

How long someone must take a psychotherapeutic medication depends on the disorder.

Many depressed and anxious people may need medication for a single period—perhaps for several months—and then never have to take it again. For some conditions, such as schizophrenia or manic-depressive illness, medication may have to be taken indefinitely or, perhaps, intermittently.

THREE

Like any medication, psychotherapeutic medications do not produce the same effect in everyone.

- Some people may respond better to one medication than another.
- Some may need larger dosages than others do.
- Some experience annoying side effects, while others do not.
- Age, sex, body size, body chemistry, physical illnesses and their treatments, diet, and habits such as smoking, are some of the factors that can influence a medication's effect.

Questions for Your Doctor

To increase the likelihood that a medication will work well, therapists, patients and their families must actively participate with the doctor prescribing it.

They must tell the doctor about the patient's past medical history, other medications being taken, anticipated life changes such as planning to have a baby and, after some experience with a medication, whether it is causing side effects.

When a medication is prescribed, the patient or family member should ask the following questions recommended by the U.S. Food and Drug Administration (FDA) and professional organizations:

- What is the name of the medication, and what is it supposed to do?
- How and when do I take it, and when do I stop taking it?
- What foods, drinks, other medications, or activities should I avoid while taking the prescribed medication?
- What are the side effects, and what should I do if they occur?
- Is there any written information available about the medication?

In this booklet of information, medications are described by their generic (chemical) names and in italics by their trade names (brand names used by drug companies).

They are divided into four large categories based on the symptoms for which they are primarily used: **antipsychotic**, **antimanic**, **antidepressant**, and **antianxiety** medications.

In addition, stimulants used for attention- deficit/ hyperactivity disorder are listed.

An index at the end of this information packet gives the trade name and the generic name of the most commonly prescribed medications. This information is provided in two lists, once alphabetical by Generic Name, and once alphabetical by Trade Name

FOUR

Treatment evaluation studies have established the efficacy of the medications described here; however, much remains to be learned about these medications.

- The National Institute of Mental Health, other Federal agencies, and private research groups are sponsoring studies of these medications.
- Scientists are hoping to improve their understanding of how and why these medications work, how to control or eliminate unwanted side effects, and how to make the medications more effective.

Antipsychotic Medications

A person who is psychotic is out of touch with reality. He may "hear voices" or have strange and untrue ideas (for example, thinking that others can hear his thoughts, or are trying to harm him, or that he is the President of the United States or some other famous person).*

He may get excited or angry for no apparent reason, or spend a lot of time off by himself, or in bed, sleeping during the day and staying awake at night.

He may neglect his appearance, not bathing or changing clothes, and may become difficult to communicate with saying things that make no sense, or barely talking at all.

These kinds of behaviors are symptoms of psychotic illness, the principal form of which is schizophrenia. All of the symptoms may not be present when someone is psychotic, but some of them always are.

Antipsychotic medications, as their name suggests, act against these symptoms. These medications cannot "cure" the illness, but they can take away many of the symptoms or make them milder. In some cases, they can shorten the course of the illness as well.

There are a number of **antipsychotic (neuroleptic)** medications available. They all work; the main differences are in the potency—that is, the dosage (amount) prescribed to produce therapeutic effects—and the side

effects. Some people might think that the higher the dose of medication, the more serious the illness, but this is not always true.

A doctor will consider several factors when prescribing an antipsychotic medication, besides how "ill" someone is. These include the patient's age, body weight, and type of medication.

Past history is important, too. If a person took a particular medication before and it worked, the doctor is likely to prescribe the same one again.

Some less potent drugs, like **chlorpromazine (*Thorazine*)**, are prescribed in higher numbers of milligrams than others of high potency, like **haloperidol (*Haldol*)**. If a person has to take a large amount of a "high-dose" antipsychotic medication, such as chlorpromazine, to get the same effect as a small amount of a "low-dose" medication, such as haloperidol, why doesn't the doctor just prescribe "low-dose" medications?

The main reason is the difference in their side effects (actions of the medication other than the one intended for the illness). These medications vary in their side effects, and some people have more trouble with certain side effects than others.

A side effect may sometimes be desirable. For instance, the sedative effect of some antipsychotic medications is useful for patients who have trouble sleeping or who become agitated during the day.

Unlike some prescription drugs, which must be taken several times during the day, antipsychotic medications can usually be taken just once a day. Thus, patients can reduce daytime side effects by taking the medications once, before bed. Some antipsychotic medications are available in forms that can be injected once or twice a month, thus assuring that the medicine is being taken reliably.

Most side effects of antipsychotic medications are mild. Many common ones disappear after the first few weeks of treatment. These include drowsiness, rapid heartbeat, and dizziness when changing position.

Some people gain weight while taking antipsychotic medications and may have to change their diet to control their weight.

Other side effects that may be caused by some antipsychotic medications include a decrease in sexual ability or interest, problems with menstrual periods, sunburn, or skin rashes.

If a side effect is especially troublesome, it should be discussed with the doctor who may prescribe a different medication, change the dosage level or schedule, or prescribe an additional medication to control the side effects.

Movement difficulties may occur with the use of antipsychotic medications, although most of them can be controlled with an anticholinergic medication. These movement problems include muscle spasms of the neck, eye, back, or other muscles; restlessness and pacing; a general slowing-down of movement and speech; and a shuffling walk.

Some of these side effects may look like psychotic or neurologic (Parkinson's disease) symptoms, but aren't. If they are severe, or persist with continued treatment with an antipsychotic, it is important to notify the doctor, who might either change the medication or prescribe an additional one to control the side effects.

Just as people vary in their responses to antipsychotic medications, they also vary in their speed of improvement. Some symptoms diminish in days, while others take weeks or months.

For many patients, substantial improvement is seen by the sixth week of treatment, although this is not true in every case. If someone does not seem to be improving, a different type of medication may be tried.

Even if a person is feeling better or completely well, he should not just stop taking the medication. Continuing to see the doctor while tapering off medication is important.

Some people may need to take medication for an extended period of time, or even indefinitely. These people usually have chronic (long-term, continuous) schizophrenic disorders, or have a history of repeated schizophrenic episodes, and are likely to become ill again.

Also, in some cases a person who has experienced one or two severe episodes may need medication indefinitely. In these cases, medication may be continued in as low a dosage as possible to maintain control of symptoms. This approach, called **maintenance treatment**, prevents relapse in many people and removes or reduces symptoms for others.

While maintenance treatment is helpful for many people, a drawback for some is the possibility of developing long-term side effects, particularly a condition called tardive dyskinesia.

This condition is characterized by involuntary movements. These abnormal movements most often occur around the mouth, but are sometimes seen in other muscle areas such as the trunk, pelvis, or diaphragm.

The disorder may range from mild to severe. For some people, it cannot be reversed, while others recover partially or completely.

Tardive dyskinesia is seen most often after long-term treatment with antipsychotic medications.

There is a higher incidence in women, with the risk rising with age.

There is no way to determine whether someone will develop this condition, and if it develops, whether the patient will recover. At present, there is no effective treatment for tardive dyskinesia.

The possible risks of long-term treatment with antipsychotic medications must be weighed against the benefits in each individual case by patient, family, and doctor.

Antipsychotic medications can produce unwanted effects when taken in combination with other medications. Therefore, the doctor should be told about all medicine being taken, including over-the-counter preparations, and the extent of the use of alcohol.

Some antipsychotic medications interfere with the action of antihypertensive medications (taken for high blood pressure), anticonvulsants (taken for epilepsy), and medications used for Parkinson's disease.

Some antipsychotic medications add to the effects of alcohol and other central nervous system depressants, such as antihistamines, antidepressants, barbiturates, some sleeping and pain medications, and narcotics.

Atypical neuroleptics

In 1990, **clozapine** (*Clozaril*), an "atypical neuroleptic," was introduced in the United States. In clinical trials, this medication was found to be more effective than traditional antipsychotic medications in individuals with treatment-resistant schizophrenia, and the risk of tardive dyskinesia is lower.

However, because of the potential side effect of a serious blood disorder, agranulocytosis, patients who are on clozapine must have a blood test each week.

The expense involved in this monitoring, together with the cost of the medication, has made maintenance on clozapine difficult for many persons with schizophrenia. However, 5 years after its introduction in the United States, approximately 58,000 persons were being treated with clozapine.

Since clozapine's approval in the United States, other atypical neuroleptics (also called atypical antipsychotics) have been introduced. **Risperidone (Risperdal)** was released in 1994, **olanzapine (Zyprexa)** in 1996, and **quetiapine (Seroquel)** in 1997.

Several other atypical neuroleptics are in development. While they have some side effects, these newer medications are generally better tolerated than either clozapine or the the traditional antipsychotics, and they do not cause agranulocytosis.

Like clozapine, they have shown little tendency to give rise to tardive dyskinesia or other movement difficulties.

Their main disadvantages compared to the older medications are a greater tendency to produce weight gain, and much higher cost.

Antimanic Medications

Bipolar disorder (manic-depressive illness) is characterized by cycling mood changes: severe highs (mania) and lows (depression). Cycles may be predominantly manic or depressive with normal mood between cycles. Mood swings may follow each other very closely, within hours or days, or may be separated by months to years. These "highs" and "lows" may vary in intensity and severity.

When someone is in a manic "high," he may be overactive, over-talkative, and have a great deal of energy. He will switch quickly from one topic to another, as if he cannot get his thoughts out fast enough; his attention span is often short, and he can easily be distracted.

Sometimes, the "high" person is irritable or angry and has false or inflated ideas about his position or importance in the world. He may be very elated, full of grand schemes which might range from business deals to romantic sprees. Often, he shows poor judgment in these ventures.

Mania, untreated, may worsen to a psychotic state.

Depression will show in a "low" mood, lack of energy, changes in eating and sleeping patterns, feelings of hopelessness, helplessness, sadness, worthlessness, and guilt, and sometimes thoughts of suicide.

Lithium

The medication used most often to combat a manic "high" is lithium. It is unusual to find mania without a subsequent or preceding period of depression. Lithium evens out mood swings in both directions, so that it is used not just for acute manic attacks or flare-ups of the illness, but also as an ongoing treatment of bipolar disorder.

Lithium will diminish severe manic symptoms in about 5 to 14 days, but it may be anywhere from days to several months until the condition is fully controlled.

Antipsychotic medications are sometimes used in the first several days of treatment to control manic symptoms until the lithium begins to take effect. Likewise, antidepressants may be needed in addition to lithium during the depressive phase of bipolar disorder.

Someone may have one episode of bipolar disorder and never have another, or be free of illness for several years. However, for those who have more than one episode, continuing (maintenance) treatment on lithium is usually given serious consideration.

Some people respond well to maintenance treatment and have no further episodes, while others may have moderate mood swings that lessen as treatment continues.

Some people may continue to have episodes that are diminished in frequency and severity.

Unfortunately, some manic-depressive patients may not be helped at all.

Response to treatment with lithium varies, and it cannot be determined beforehand who will or will not respond to treatment.

Regular blood tests are an important part of treatment with lithium. A

lithium level must be checked periodically to measure the amount of the drug in the body.

If too little is taken, lithium will not be effective.

If too much is taken, a variety of side effects may occur.

The range between an effective dose and a toxic one is small.

A lithium level is routinely checked at the beginning of treatment to determine the best lithium dosage for the patient. Once a person is stable and on maintenance dosage, a lithium level should be checked every few months.

How much lithium a person needs to take may vary over time, depending on how ill he is, his body chemistry, and his physical condition.

Anything that lowers the level of sodium (table salt is sodium chloride) in the body may cause a lithium buildup and lead to toxicity.

Reduced salt intake, heavy sweating, fever, vomiting, or diarrhea may do this. An unusual amount of exercise or a switch to a low-salt diet are examples. It's important to be aware of conditions that lower sodium and to share this information with the doctor, as the lithium dosage may have to be adjusted.

When a person first takes lithium, he may experience side effects, such as drowsiness, weakness, nausea, vomiting, fatigue, hand tremor, or increased thirst and urination. These usually disappear or subside quickly, although hand tremor may persist.

Weight gain may also occur. Dieting will help, but crash diets should be avoided because they may affect the lithium level. Drinking low-calorie or no-calorie beverages will help keep weight down.

Kidney changes, accompanied by increased thirst and urination, may develop during treatment. These conditions that may occur are generally manageable and are reduced by lowering the dosage.

Because lithium may cause the thyroid gland to become under-active (hypothyroidism) or sometimes enlarged (goiter), thyroid function monitoring is a part of the therapy. To restore normal thyroid function, thyroid hormone is given along with lithium.

Because of possible complications, lithium may either not be recommended or may be given with caution when a person has existing

thyroid, kidney, or heart disorders, epilepsy, or brain damage.

Women of child-bearing age should be aware that lithium increases the risk of congenital malformations in babies born to women taking lithium. Special caution should be taken during the first 3 months of pregnancy.

Lithium, when combined with certain other medications, can have unwanted effects.

Some diuretic substances that remove water from the body increase the level of lithium and can cause toxicity. Other diuretics, like coffee and tea, can lower the level of lithium.

Signs of lithium toxicity may include nausea, vomiting, drowsiness, mental dullness, slurred speech, confusion, dizziness, muscle twitching, irregular heart beat, and blurred vision.

A serious lithium overdose can be life-threatening.

Someone who is taking lithium should tell all the doctors including dentists he sees about all other medications he is taking.

With regular monitoring, lithium is a safe and effective drug that enables many people, who otherwise would suffer from incapacitating mood swings, to lead normal lives.

Anticonvulsants

Not all patients with symptoms of mania benefit from lithium. Some have been found to respond to other types of medication, such as the anticonvulsant medications that are usually used to treat epilepsy.

Carbamazepine (*Tegretol*) is the anticonvulsant that has been most widely used. Manic-depressive patients who cycle rapidly, that is, they change from mania to depression and back again over the course of hours or days rather than months, seem to respond particularly well to carbamazepine.

Early side effects of carbamazepine, although generally mild, include drowsiness, dizziness, confusion, disturbed vision, perceptual distortions,

memory impairment, and nausea. They are usually transient and often respond to temporary dosage reduction.

Another common but generally mild adverse effect is the lowering of the white blood cell count which requires periodic blood tests to monitor against the rare possibility of more serious, even life-threatening, bone marrow depression.

Also serious are the skin rashes that can occur in 15 to 20 percent of patients. These rashes are sometimes severe enough to require discontinuation of the medication.

In 1995, the anticonvulsant **divalproex sodium** (*Depakote*) was approved by the Food and Drug Administration for manic-depressive illness. Clinical trials have shown it to have an effectiveness in controlling manic symptoms equivalent to that of lithium; it is effective in both rapid-cycling and non-rapid-cycling bipolar.

Though divalproex can cause gastrointestinal side effects, the incidence is low. Other adverse effects occasionally reported are headache, double vision, dizziness, anxiety, or confusion.

Because in some cases divalproex has caused liver dysfunction, liver function tests should be performed prior to therapy and at frequent intervals thereafter, particularly during the first six months of therapy.

Antidepressant Medications

The kind of depression that will most likely benefit from treatment with medications is more than just "the blues." It's a condition that's prolonged, lasting 2 weeks or more, and interferes with a person's ability to carry on daily tasks and to enjoy activities that previously brought pleasure.

The depressed person will seem sad, or "down," or may show a lack of interest in his surroundings.

He may have trouble eating and lose weight (although some people eat more and gain weight when depressed).

He may sleep too much or too little, have difficulty going to sleep, sleep restlessly, or awaken very early in the morning.

He may speak of feeling guilty, worthless, or hopeless.

He may complain that his thinking is slowed down.

He may lack energy, feeling "everything's too much," or he might be agitated and jumpy.

A person who is depressed may cry.

He may think and talk about killing himself and may even make a suicide attempt.

Some people who are depressed have psychotic symptoms, such as delusions (false ideas) that are related to their depression. For instance, a psychotically depressed person might imagine that he is already dead, or "in hell," being punished.

Not everyone who is depressed has all these symptoms, but everyone who is depressed has at least some of them.

A depression can range in intensity from mild to severe.

Antidepressants are used most widely for serious depressions, but they can also be helpful for some milder depressions. Antidepressants, although they are not "uppers" or stimulants, take away or reduce the symptoms of depression and help the depressed person feel the way he did before he became depressed.

Antidepressants are also used for disorders characterized principally by anxiety. They can block the symptoms of panic, including rapid heartbeat, terror, dizziness, chest pains, nausea, and breathing problems. They can also be used to treat some phobias.

The physician chooses the particular antidepressant to prescribe based on the individual patient's symptoms.

When someone begins taking an antidepressant, improvement generally will not begin to show immediately. With most of these medications, it will take from 1 to 3 weeks before changes begin to occur.

Some symptoms diminish early in treatment; others, later. For instance, a person's energy level or sleeping or eating patterns may improve before his depressed mood lifts.

If there is little or no change in symptoms after 5 to 6 weeks, a different medication may be tried. Some people will respond better to one than another. Since there is no certain way of determining beforehand which medication will be effective, the doctor may have to prescribe first one, then another, until an effective one is found.

Treatment is continued for a minimum of several months and may last up to a year or more.

While some people have one episode of depression and then never have another, or remain symptom-free for years, others have more frequent episodes or very long-lasting depressions that may go on for years.

Some people find that their depressions become more frequent and severe as they get older. For these people, continuing (maintenance) treatment with antidepressants can be an effective way of reducing the frequency and severity of depressions.

Those that are commonly used have no known long-term side effects and may be continued indefinitely. The prescribed dosage of the medication may be lowered if side effects become troublesome.

Lithium can also be used for maintenance treatment of repeated depressions whether or not there is evidence of a manic or manic-like episode in the past.

Dosage of antidepressants varies, depending on the type of drug, the person's body chemistry, age, and, sometimes, body weight.

Dosages are generally started low and raised gradually over time until the desired effect is reached without the appearance of troublesome side effects.

There are a number of antidepressant medications available. They differ in their side effects and, to some extent, in their level of effectiveness.

Tricyclic antidepressants (named for their chemical structure) are more commonly used for treatment of major depressions than are **monoamine oxidase inhibitors (MAOIs)**; but MAOIs are often helpful in so-called "atypical" depressions in which there are symptoms like oversleeping, anxiety, panic attacks, and phobias.

The last few years have seen the introduction of a number of new antidepressants. Several of them are called "selective serotonin reuptake inhibitors" (SSRIs).

Those available at the present time in the United States are **fluoxetine (Prozac)**, **fluvoxamine (Luvox)**, **paroxetine (Paxil)**, and **sertraline (Zoloft)**. (*Luvox* has been approved for obsessive-compulsive disorder, and *Paxil* has been approved for panic disorder.)

Though structurally different from each other, all the SSRIs' antidepressant effects are due to their action on one specific neurotransmitter, serotonin.

Two other antidepressants that affect two neurotransmitters serotonin and norepinephrine have also been approved by the FDA. They are **venlafaxine (Effexor)** and **nefazodone (Serzone)**. All of these newer antidepressants seem to have less bothersome side effects than the older tricyclic antidepressants.

The tricyclic antidepressant **clomipramine (Anafranil)** affects serotonin but is not as selective as the SSRIs. It was the first medication specifically approved for use in the treatment of obsessive-compulsive disorder (OCD). *Prozac* and *Luvox* have now been approved for use with OCD.

Another of the newer antidepressants, **bupropion (Wellbutrin)**, is chemically unrelated to the other antidepressants. It has more effect on norepinephrine and dopamine than on serotonin. *Wellbutrin* has not been associated with weight gain or sexual dysfunction. It is contraindicated for individuals with, or at risk for, a seizure disorder or who have been diagnosed with bulimia or anorexia nervosa.

Side Effects of Antidepressant Medications

1. Tricyclic Antidepressants

There are a number of possible side effects with tricyclic antidepressants that vary, depending on the medication. For example, **amitriptyline (Elavil)** may make people feel drowsy, while **protriptyline (Vivactil)** hardly does this at all and, in some people, may have an opposite effect, producing feelings of anxiety and restlessness.

Because of this kind of variation in side effects, one antidepressant might be highly desirable for one person and not recommended for another.

Tricyclics on occasion may complicate specific heart problems, and for this reason the physician should be aware of all such difficulties.

Other side effects with tricyclics may include blurred vision, dry mouth, constipation, weight gain, dizziness when changing position, increased sweating, difficulty urinating, changes in sexual desire, decrease in sexual ability, muscle twitches, fatigue, and weakness.

Not all of these medications produce all side effects, and not everybody gets them.

Some will disappear quickly, while others may remain for the length of treatment.

Some side effects are similar to symptoms of depression (for instance, fatigue and constipation). For this reason, the patient or family should discuss all symptoms with the doctor, who may change the medication or dosage.

Tricyclics also may interact with thyroid hormone, antihypertensive medications, oral contraceptives, some blood coagulants, some sleeping medications, antipsychotic medications, diuretics, antihistamines, aspirin, bicarbonate of soda, vitamin C, alcohol, and tobacco.

An overdose of antidepressants is serious and potentially lethal. It requires immediate medical attention.

Symptoms of an overdose of tricyclic antidepressant medication develop within an hour and may start with rapid heartbeat, dilated pupils, flushed face, and agitation, and progress to confusion, loss of consciousness, seizures, irregular heart beats, cardiorespiratory collapse, and death.

2. The Newer Antidepressants

The most common side effects of these antidepressants are gastrointestinal problems and headache. Others are insomnia, anxiety, and agitation.

Because of potentially serious interaction between these medications and monoamine oxidase inhibitors (MAOI's), it is advisable to stop taking one

medication from 2 to 4 or 5 weeks before starting the other, depending on the specific medications involved.

In addition, some SSRIs have been found to affect metabolism of certain other medications in the liver, creating possible drug interactions.

3. Monoamine Oxidase Inhibitors (MAOIs)

MAOIs may cause some side effects similar to those of the other antidepressants. Dizziness when changing position and rapid heartbeat are common.

MAOIs also react with certain foods and alcoholic beverages (such as aged cheeses, foods containing monosodium glutamate (MSG), Chianti and other red wines), and other medications (such as over-the-counter cold and allergy preparations, local anesthetics, amphetamines, insulin, some narcotics, and antiparkinsonian medications).

These reactions often do not appear for several hours. Signs may include severe high blood pressure, headache, nausea, vomiting, rapid heartbeat, possible confusion, psychotic symptoms, seizures, stroke, and coma.

For this reason, people taking MAOIs *must* stay away from restricted foods, drinks, and medications.

They should be sure that they are furnished, by their doctor or pharmacist, a list of *all* foods, beverages, and other medications that should be avoided.

Precautions to be Observed When Taking Antidepressants

When taking antidepressants, it is important to tell all doctors (and dentists) being seen—not just the one who is treating the depression—about all medications being used, including over-the-counter preparations and alcohol. Antidepressants should be taken only in the amount prescribed and should be kept in a secure place away from children. When used with proper care, following doctors' instructions, antidepressants are extremely useful medications that can reverse the misery of a depression and help a person feel like himself again.

Antianxiety Medications

Everyone experiences anxiety at one time or another. "Butterflies in the stomach" before giving a speech or sweaty palms during a job interview are common symptoms.

Other symptoms of anxiety include irritability, uneasiness, jumpiness, feelings of apprehension, rapid or irregular heartbeat, stomach ache, nausea, faintness, and breathing problems.

Anxiety is often manageable and mild. But sometimes it can present serious problems. A high level or prolonged state of anxiety can be very incapacitating, making the activities of daily life difficult or impossible.

Besides generalized anxiety, other anxiety disorders are panic, phobia, obsessive-compulsive disorder (OCD), and posttraumatic stress disorder.

Phobias, which are persistent, irrational fears and are characterized by avoidance of certain objects, places, and things, sometimes accompany anxiety.

A panic attack is a severe form of anxiety that may occur suddenly and is marked with symptoms of nervousness, breathlessness, pounding heart, and sweating. Sometimes the fear that one may die is present.

Antianxiety medications help to calm and relax the anxious person and remove the troubling symptoms. There are a number of antianxiety medications currently available.

The preferred medications for most anxiety disorders are the **benzodiazepines**. In addition to the benzodiazepines, a non-benzodiazepine, **buspirone (*BuSpar*)**, is used for generalized anxiety disorders.

Antidepressants are also effective for panic attacks and some phobias, and are often prescribed for these conditions. They are also sometimes used for more generalized forms of anxiety, especially when it is accompanied by depression.

The medications approved by the FDA for use in OCD are all antidepressants: **clomipramine, fluoxetine, and fluvoxamine**.

The most commonly used benzodiazepines are **alprazolam (*Xanax*)** and **diazepam (*Valium*)**, followed by **chlordiazepoxide (*Librium, Librax, Libritabs*)**.

Benzodiazepines are relatively fast-acting medications; in contrast, buspirone must be taken daily for 2 or 3 weeks prior to exerting its antianxiety effect. Most benzodiazepines will begin to take effect within hours, some in even less time.

Benzodiazepines differ in duration of action in different individuals; they may be taken two or three times a day, or sometimes only once a day.

Dosage is generally started at a low level and gradually raised until symptoms are diminished or removed. The dosage will vary a great deal depending on the symptoms and the individual's body chemistry.

Benzodiazepines have few side effects. Drowsiness and loss of coordination are most common; fatigue and mental slowing or confusion can also occur.

These effects make it dangerous to drive or operate some machinery when taking benzodiazepines especially when the patient is just beginning treatment. Other side effects are rare.

Benzodiazepines combined with other medications can present a problem, notably when taken together with commonly used substances such as alcohol. It is wise to abstain from alcohol when taking benzodiazepines, as the interaction between benzodiazepines and alcohol can lead to serious and possibly life-threatening complications.

Following the doctor's instructions is important. The doctor should be informed of all other medications the patient is taking, including over-the-counter preparations.

Benzodiazepines increase central nervous system depression when combined with alcohol, anesthetics, antihistamines, sedatives, muscle relaxants, and some prescription pain medications.

Particular benzodiazepines may influence the action of some anticonvulsant and cardiac medications.

Benzodiazepines have also been associated with abnormalities in babies born to mothers who were taking these medications during pregnancy.

With benzodiazepines, there is a potential for the development of tolerance and dependence as well as the possibility of abuse and withdrawal reactions.

For these reasons, the medications are generally prescribed for brief periods of time days or weeks and sometimes intermittently, for stressful situations or anxiety attacks.

For the same reason, ongoing or continuous treatment with benzodiazepines is not recommended for most people. Some patients may, however, need long-term treatment.

Consult with the doctor before discontinuing a benzodiazepine. A withdrawal reaction may occur if the treatment is abruptly stopped. Withdrawal symptoms may include anxiety, shakiness, headache, dizziness, sleeplessness, loss of appetite, and, in more severe cases, fever, seizures, and psychosis.

A withdrawal reaction may be mistaken for a return of the anxiety, since many of the symptoms are similar. Thus, after benzodiazepines are taken for an extended period, the dosage is gradually tapered off before being completely stopped.

Although benzodiazepines, buspirone, tricyclic antidepressants, or SSRIs are the preferred medications for most anxiety disorders, occasionally, for specific reasons, one of the following medications may be prescribed:

antipsychotic medications; antihistamines (such as *Atarax*, *Vistaril*, and others); barbiturates such as *phenobarbital*; and beta-blockers such as *propranolol (Inderal, Inderide)*. Propanediols such as *meprobamate (Equanil)* were commonly prescribed prior to the introduction of the benzodiazepines, but today rarely are used.

FIVE**CHILDREN,
THE ELDERLY,
AND PREGNANT, NURSING,
OR CHILD-BEARING AGE
WOMEN*****Special Considerations***

Children, the elderly, and pregnant and nursing women have special concerns and needs when taking psychotherapeutic medications. Some effects of medications on the growing body, the aging body, and the childbearing body are known, but much remains to be learned. Research in these areas is ongoing.

While, in general, what has been said in this information packet applies to these groups, below are a few special points to bear in mind.

Children

Studies consistently show that about 15 percent of the U.S. population below age 18, or over 9 million children, suffer from a psychiatric disorder that compromises their ability to function.

It is easy to overlook the seriousness of childhood mental disorders. In children, these disorders may present symptoms that are different or less clear-cut than the same disorders in adults. Younger children, especially, may not talk about what's bothering them, but this is sometimes a problem with older children as well. For this reason, having a doctor, other mental health professional, or psychiatric team examine the child is especially important.

There is an array of treatments that can help these children. These include medications and psychotherapy behavioral therapy, treatment of impaired social skills, parental and family therapy, group therapy. The therapy used for an individual child is based on the child's diagnosis and individual needs.

When the decision is reached that a child should take medication, active monitoring by all caretakers (parents, teachers, others who have charge of the child) is essential.

Children should be watched and questioned for side effects (many children, especially younger ones, do not volunteer information). They should also be monitored to see that they are actually taking the medication and taking the proper dosage.

One type of medication not covered elsewhere here is stimulants. Three stimulants, **methylphenidate (*Ritalin*)**, **dextroamphetamine (*Dexedrine*)**, and **pemoline (*Cylert*)** are more commonly prescribed for children than adults, although pemoline is not considered a first-line drug therapy for ADHD because of potential serious side effects of the liver.

They are successfully used in the treatment of attention-deficit/hyperactivity disorder (ADHD).

ADHD is a disorder usually diagnosed in early childhood in which the child exhibits such symptoms as short attention span, excessive activity, and impulsivity.

A child with ADHD should take a stimulant medication only on the advice and under the careful supervision of a physician.

The use with children of the medications described in this information packet is more limited than with adults. In the list of medications at the end of this document, commonly used psychotropic medications that have specific indications and dose guidelines for children, as listed in the *Physicians' Desk Reference*, are indicated by a double asterisk (**).

The Elderly

Persons over the age of 65 make up 12 percent of the population of the United States, yet they receive 30 percent of prescriptions filled.

The elderly generally have more medical problems and often are taking medications for more than one of these problems.

In addition, they tend to be more sensitive to medications. Even healthy older people eliminate some medications from the body more slowly than younger persons and therefore require a lower or less frequent dosage to maintain an effective level of medication.

The elderly may sometimes accidentally take too much of a medication because they forget that they have already taken a dose, and then they take another dose. The use of a 7-day pill box is especially helpful to an elderly person.

The elderly and those close to them – friends, relatives, caretakers – need to pay special attention and watch for adverse (negative) physical and psychological responses to medication.

Because they often take more medications – not only those prescribed but also over-the-counter preparations and home or folk remedies – the possibility of negative drug interactions is higher.

Pregnant, Nursing, or Childbearing-Age Women

In general, during pregnancy, all medications (including psychotherapeutic medications) should be avoided where possible, and other methods of treatment should be tried.

A woman who is taking a psychotherapeutic medication and plans to become pregnant should discuss her plans with her doctor. If she discovers that she is pregnant, she should contact her doctor immediately.

During early pregnancy, there is a possible risk of birth defects with some of these medications, and for this reason:

➡ **Lithium is not recommended during the first 3 months of pregnancy.**

➡ **Benzodiazepines are not recommended during the first 3 months of pregnancy.**

The decision to use a psychotherapeutic medication should be made only after a careful discussion with the doctor concerning the risks and benefits to the woman and her baby.

Small amounts of medication pass into the breast milk. This is a consideration for mothers who are planning to breast-feed.

A woman who is taking birth-control pills should be sure that her doctor is aware of this. The estrogen in these pills may alter the breakdown of medications by the body, thereby increasing side effects of some antianxiety medications and/or reducing their efficacy to relieve symptoms of anxiety.

SECTION 3

INDEX AND HISTORY OF MEDICATIONS

NOTE: Some drugs, such as amitriptyline and chlordiazepoxide, are marketed under numerous trade names, not all of which can be mentioned in a brief publication such as this. If your medication's trade name does not appear in this list, look it up by its generic name, or ask your doctor or pharmacist for more information.

➔ LIST 1 – *Alphabetical by GENERIC Name*

GENERIC NAME

TRADE NAME

Antipsychotic Medications

○ chlorpromazine**	Thorazine
○ chlorprothixene	Taractan
○ clozapine	Clozaril
○ fluphenazine	Permitil
○ NO GENERIC NAME	Prolixin
○ haloperidol**	Haldol
○ loxapine	Daxolin
○ NO GENERIC NAM	Loxitane
○ mesoridazine	Serentil
○ molindone	Lidone
○ NO GENERIC NAME	Moban
○ olanzapine	Zyprexa
○ perphenazine	Trilafon
○ pimozide	Orap (for Tourette's Syndrome)**
○ quetiapine	Seroquel
○ risperidone	Risperdal
○ thioridazine**	Mellaril
○ thiothixene	Navane
○ trifluoperazine	Stelazine
○ triflupromazine	Vesprin
○ ziprasidone	Geodon

GENERIC NAMETRADE NAME**Antimanic Medications**

<input type="radio"/> carbamazepine	Tegretol
<input type="radio"/> divalproex sodium	Depakote
<input type="radio"/> gabapentin	Neurontin
<input type="radio"/> lamotrigine	Lamictal
<input type="radio"/> lithium carbonate	Eskalith
<input type="radio"/> lithium carbonate	Lithane
<input type="radio"/> NO GENERIC NAME	Lithobid
<input type="radio"/> lithium citrate	Cibalith-S
<input type="radio"/> topiramate	Topomax

GENERIC NAMETRADE NAME**Antidepressants**

<input type="radio"/> amitriptyline	Elavil
<input type="radio"/> amoxapine	Asendin
<input type="radio"/> bupropion	Wellbutrin
<input type="radio"/> citalopram	Celexa
<input type="radio"/> clomipramine**	Anafranil
<input type="radio"/> desipramine	Norpramin
<input type="radio"/> NO GENERIC NAME	Pertofrane
<input type="radio"/> doxepin	Adapin
<input type="radio"/> NO GENERIC NAME	Sinequan
<input type="radio"/> fluvoxamine (SSRI)	Luvox
<input type="radio"/> fluoxetine (SSRI)	Prozac
<input type="radio"/> imipramine**	Tofranil
<input type="radio"/> isocarboxazid (MAOI)	Marplan
<input type="radio"/> maprotiline	Ludiomil
<input type="radio"/> mirtazapine	Remeron
<input type="radio"/> nefazodone	Serzone
<input type="radio"/> nortriptyline	Aventyl
<input type="radio"/> NO GENERIC NAME	Pamelor
<input type="radio"/> paroxetine (SSRI)	Paxil
<input type="radio"/> phenelzine (MAOI)	Nardil
<input type="radio"/> protriptyline	Vivactil
<input type="radio"/> sertraline (SSRI)	Zoloft
<input type="radio"/> tranylcypromine (MAOI)	Parnate
<input type="radio"/> trazodone	Desyrel
<input type="radio"/> trimipramine	Surmontil
<input type="radio"/> venlafaxine	Effexor

GENERIC NAMETRADE NAME***Antianxiety Medications***

(All of these antianxiety medications—except buspirone—are benzodiazepines)

<input type="radio"/> alprazolam	Xanax
<input type="radio"/> buspirone	BuSpar
<input type="radio"/> chlordiazepoxide	Librax
<input type="radio"/> NO GENERIC NAME	Libritabs
<input type="radio"/> NO GENERIC NAME	Librium
<input type="radio"/> clorazepate	Azene
<input type="radio"/> NO GENERIC NAME	Tranxene
<input type="radio"/> diazepam	Valium
<input type="radio"/> halazepam	Paxipam
<input type="radio"/> lorazepam	Ativan
<input type="radio"/> oxazepam	Serax
<input type="radio"/> prazepam	Centrax

GENERIC NAMETRADE NAME***Stimulants***

(Given for Attention Deficit Hyperactivity Disorder)

<input type="radio"/> amphetamine with dextroamphetamine	Adderall
<input type="radio"/> d-amphetamine**	Dexedrine
<input type="radio"/> methylphenidate**	Ritalin
<input type="radio"/> methylphenidate (long-acting)	Concerta
<input type="radio"/> NO GENERIC NAME	Metadate
<input type="radio"/> pemoline**	Cylert

➤ **LIST 2 – Alphabetical by TRADE Name**

TRADE NAME GENERIC NAME

Antipsychotic Medications

○ Clozaril	clozapine
○ Daxolin	loxapine
○ Geodon	ziprasidone
○ Haldol**	haloperidol
○ Lidone	molindone
○ Loxitane	loxapine
○ Mellaril**	thioridazine
○ Moban	molindone
○ Navane	thiothixene
○ Orap	pimozide (for Tourette's Syndrome)**
○ Permitil	fluphenazine
○ Prolixin	fluphenazine
○ Risperdal r	isperidone
○ Serentil	mesoridazine
○ Seroquel	quetiapine
○ Stelazine	trifluoperazine
○ Taractan	chlorprothixene
○ Thorazine**	chlorpromazine
○ Trilafon	perphenazine
○ Vesprin	trifluopromazine
○ Zyprexa	olanzapine

TRADE NAME GENERIC NAME

Antimanic Medications

○ Cibalith-S	lithium citrate
○ Depakote	divalproex sodium
○ Eskalith	lithium carbonate
○ Lamictal	lamotrigine
○ Lithane	lithium carbonate
○ Lithobid	lithium carbonate
○ Neuronting	gabapentin
○ Tegretol	carbamazepine
○ Topomax	topiramate

<u>TRADE NAME</u>	<u>GENERIC NAME</u>
-------------------	---------------------

Antidepressant Medications

<input type="radio"/> Adapin	doxepin
<input type="radio"/> Anafranil**	clomipramine
<input type="radio"/> Asendin	amoxapine
<input type="radio"/> Aventyl	nortriptyline
<input type="radio"/> Celexa	citalopram
<input type="radio"/> Desyrel	trazodone
<input type="radio"/> Effexor	venlafaxine
<input type="radio"/> Elavil	amitriptyline
<input type="radio"/> Ludiomil	maprotiline
<input type="radio"/> Luvox (SSRI)	fluvoxamine
<input type="radio"/> Marplan (MAOI)	isocarboxazid
<input type="radio"/> Nardil (MAOI)	phenelzine
<input type="radio"/> Norpramin	desipramine
<input type="radio"/> Pamelor	nortriptyline
<input type="radio"/> Parnate (MAOI)	tranylcypromine
<input type="radio"/> Paxil (SSRI)	paroxetine
<input type="radio"/> Pertofrane	desipramine
<input type="radio"/> Prozac (SSRI)	fluoxetine
<input type="radio"/> Remeron	mirtazapine
<input type="radio"/> Serzone	nefazodone
<input type="radio"/> Sinequan	doxepin
<input type="radio"/> Surmontil	trimipramine
<input type="radio"/> Tofranil**	imipramine
<input type="radio"/> Vivactil	protriptyline
<input type="radio"/> Wellbutrin	bupropion
<input type="radio"/> Zoloft (SSRI)	sertraline

<u>TRADE NAME</u>	<u>GENERIC NAME</u>
-------------------	---------------------

Antianxiety Medications

(All of these antianxiety medications except buspirone are benzodiazepines)

Ativan	lorazepam
Azene	clorazepate
BuSpar	buspirone
Centrax	prazepam
Paxipam	halazepam
Serax	oxazepam
Tranxene	clorazepate

Valium	diazepam
Xanax	alprazolam
<u>TRADE NAME</u>	<u>GENERIC NAME</u>

Stimulants

(Given for Attention Deficit Hyperactivity Disorder)

- | | |
|--------------------------|------------------------------------|
| ○ Adderall | amphetamine with dextroamphetamine |
| ○ Concerta | methylphenidate (long-acting) |
| ○ Cylert** | pemoline |
| ○ Dexedrine** | d-amphetamine |
| ○ Metadate (long-acting) | NO GENERIC NAME |
| ○ Ritalin** | methylphenidate |

NOTES:

Due to its potential for serious side effects of the liver, **pemoline (Cylert)** should not ordinarily be considered as the first-line drug therapy for ADHD.

At one time, two combination medications not included in the above list were often prescribed, but are prescribed only occasionally today. They are: a combination of **amitriptyline (antidepressant)** and **perphenazine (antipsychotic)** marketed as **Triavil** or **Etrafon**; and a combination of **amitriptyline (antidepressant)** and **chlordiazepoxide (antianxiety)** marketed as **Limbitrol**.

Reference

AHFS Drug Information, 91. Gerald K. McEvoy, Editor. Bethesda, Maryland: American Society of Hospital Pharmacists, Inc., 1991.

Bohn J. And Jefferson J.W., *Lithium and Manic Depression: A Guide*. Madison, Wisconsin: Lithium Information Center, rev. ed. 1990.

Goodwin F.K. and Jamison K.R. *Manic-Depressive Illness*. New York: Oxford University Press, 1990.

Jensen P.S., Vitiello B., Leonard H., and Laughren T.P. Child and adolescent psychopharmacology: expanding the research base. *Psychopharmacology Bulletin*, Vol. 30, No. 1, 1994.

Johnston H.F. *Stimulants and Hyperactive Children: A Guide*. Madison, Wisconsin: Lithium Information Center, 1990.

Medenwald J.R., Greist J.H., and Jefferson J.W. *Carbamazepine and Manic Depression: A Guide*. Madison, Wisconsin: Lithium Information Center, rev. ed., 1990.

Physicians' Desk Reference, 48th edition. Montvale, New Jersey: Medical Economics Data Production Company, 1994.

New Developments in Pharmacologic Treatment of Schizophrenia.
 Rockville, Maryland: National Institute of Mental Health, 1992.
 Updated: December 12, 2001

INTERESTING DRUG HISTORY

Psychotherapeutic Drugs developed in the 1950s:

1956 - Joseph V. Brady's article "Assessment of Drug Effects on Emotional Behavior" was published in *Science*. The article reported the selective effects of reserpine on anxiety responses and was followed by the establishment of behavioral pharmacology laboratories at virtually every major U.S. pharmaceutical company.

-This item and those bulleted below are all from *Street*, 1994.

- **1950** - **Chlorpromazine (Thorazine)** was first synthesized at the Laboratoires Rhone-Poulenc/Specia. A commonly used antipsychotic drug, chlorpromazine was first developed as an antihistamine. Henri Laborit found it useful in reducing surgical shock. One reason it was tried on patients with schizophrenia was because, like cold-water bath treatments, it lowered body temperature.
- **1953** - The antiepileptic drug **Dilantin (phenytoin; Parke-Davis)** was approved for use by the U.S. Food and Drug Administration. Phenytoin appears to control seizures by promoting sodium efflux from neurons, increasing the threshold of stimulation for neural firing.
- **1954** - The drug **Amytal (amobarbital sodium; Lilly)** was approved for use by the U.S. Food and Drug Administration (FDA). Amobarbital is a barbiturate and is used as an antianxiety agent and as a sedative. Amytal is a trade name frequently prescribed, but amobarbital sodium was first approved by the FDA on April 18, **1939**, when it was marketed by Parke-Davis as **Thioethamyl**.
- **1954** - The antipsychotic drug **Thorazine (chlorpromazine hydrochloride; Smith, Kline, and French)** was approved by the U.S. Food and Drug Administration. It was the first of the phenothiazines put into general use and works primarily by blocking the neural transmitter dopamine. Thorazine became widely, even abusively, used in institutional settings.
- **1957** - Lowell Randall first reported the sedative effect in humans of the benzodiazepine **chlordiazepoxide**. The drug was synthesized by Leo Sternbach and left on a shelf for 18 months. Almost thrown out in a lab cleanup, it was tested on animals because the chemical analysis had already been done. The drug was eventually marketed for anxiety reduction as **Librium** (Hoffman-LaRoche).
- **1957** - The antidepressant effects of **monamine oxidase (MAO) inhibitors** were first announced by Harry Loomer at a meeting in Syracuse, New York. The drug was **iproniazid**, marketed as **Marsilid**,

THANK YOU FOR YOUR PARTICIPATION IN THIS COURSE

To receive continuing education credit for this course, you must have read this entire text file.

You must also complete and return the Evaluation of Learning Quiz and pay the CEU fee. (Instructions are on the next page.)

We always appreciate constructive input from our customers - even when it's 'negative', so please feel free to fill in the "Additional Comments" section of the Grade This Course evaluation when you submit your quiz and payment.



Richard K. Nongard, LMFT, CCH, CPFT
Executive Director

"MEDICATIONS AND MENTAL ILLNESS"

3 Continuing Education Clock Hours

Procedures to Receive CEU Credit:

- ⇒ This document contains all of the course materials you needed to read.
- ⇒ Now you must complete the required True/False Evaluation of Learning Quiz and submit it to our office along with your payment, in order to obtain your CEU certificate.

FOR ONLINE SUBMISSION:

Go back to www.FastCEUs.com and click the "QUIZ & PAY" button for this course (below the READ COURSE button you clicked to get this file.).

On the page that opens, enter your information and take the T/F Quiz.

When you click SUBMIT, the program will instantly grade your quiz, and provided you pass by at least 80%, it will then charge your credit or debit card.

Immediately, a new web page will open containing your Receipt and Certificate info, and a Link will be provided to access a fancy Certificate for you to Print and/or Save to your computer.

You will also receive an Email containing this same information and the link.

- ⊙ ***You will NOT receive a paper certificate in the mail*** - *This electronic system provides numerous options for you to print and save your CEUs.*

FOR FAX OR MAIL SUBMISSION:

Print the Quiz and Payment forms on the next few pages of this document, and complete the requested information.

Our 24-hour secure Fax number is **(888)-877-6020**.

If you fax your quiz and payment to us, please do NOT also mail it.

We process faxes within approximately 4 business hours after receiving them. Faxes submitted late in the day or after hours will be processed the next business morning. However, all certificates are dated the date we receive your course quiz and payment.

You will NOT receive a paper copy of your Certificate in the mail.

Enter either your fax number or an Email address and we will send your CEU Certificate to the contact info you provide.

If you prefer to use a check or money order, please Mail the quiz and payment to:

**PeachTree Professional Education, Inc.
15560 N. Frank L. Wright Blvd, #B4-118
Scottsdale, AZ 85260**

EVALUATION OF LEARNING QUIZ - PAGE 1 of 3

PRINT & FAX or MAIL THIS PAGE AND THE ANSWERS PAGES TO OUR OFFICE

*** * * * OR * * * ***

You may complete and submit this information **ONLINE** by following this link:

<https://www.fastceus.org/index.php?extension=meds>

PLEASE NEATLY PRINT THE FOLLOWING INFORMATION:

NAME as you want it on your CEU Certificate: _____

Your professional cert/license with numbers: _____

ADDRESS for record keeping: Street: _____

City: _____

State: _____ Zip: _____

DAYTIME TELEPHONE Number: (_____)_____

Ⓞ We will FAX or EMAIL your CEU Certificate (NO copy will be mailed).

— **CLEARLY PRINT** YOUR FAX # or EMAIL ADDRESS:

(IF you FAX us your Evaluations do NOT mail them. Please WRITE NEATLY so you get your CEUs.)

MEDICATIONS AND MENTAL ILLNESS

This **3** Hour CEU Course is **\$49.00**

CIRCLE: Master Card Visa Discover Card American Express Check Enclosed

Card Number: _____

Card Expiration Date: _____ Security Code: _____

(Security Code is last 3 digits on back of card for MC, Visa, Discover - or 4 digits on front for Amex)

Signature: _____

Mail: PeachTree Professional Education, Inc.
15560 N. Frank L. Wright Blvd, #B4-118
Scottsdale, AZ 85260

Phone: (800) 390-9536
Fax: (888) 877-6020

EVALUATION OF LEARNING QUIZ - PAGE 2 of 3

Course Title: "Medications and Mental Illness"

3 Hours of Approved Continuing Education Credit

The purpose of the following Evaluation of Learning questions is to:

- A.) Verify that you have read the required course materials
- B.) Demonstrate an understanding of the practical application of the course materials
- C.) Officially document your participation and completion of this course

☞ PLEASE ANSWER THE FOLLOWING EVALUATION OF LEARNING QUESTIONS.

- T F** 1.) I have read all of the required reading for this course.
- T F** 2.) ADD/ADHD is caused by a Ritalin deficiency.
- T F** 3.) Clients recovering from addiction should never be medicated
- T F** 4.) Children should not receive psychotropics.
- T F** 5.) Nurses and physicians should be the only ones providing medication education.
- T F** 6.) Doctors always prescribe with common sense.
- T F** 7.) Side effects of medication can be behavioral/emotional in nature.
- T F** 8.) Therapists should own a P.D.R.
- T F** 9.) Learning about medication is a clinician's responsibility.
- T F** 10.) Paxil has a short half-life.
- T F** 11.) Prozac is effective when taken intermittently during periods of depression.
- T F** 12.) Moban and Navane are anti-depressants.
- T F** 13.) Paxil is an anti-psychotic medication.
- T F** 14.) Lithium is not recommended during the first 3 months of pregnancy.
- T F** 15.) Persons over the age of 65 make up 12 percent of the population of the United States, yet they receive 30 percent of prescriptions filled.
- T F** 16.) Pemoline is not considered a first-line drug therapy for ADHD because of potential serious side effects of the liver.
- T F** 17.) In addition to the benzodiazepines, a non-benzodiazepine, buspirone (BuSpar), is used for generalized anxiety disorders.
- T F** 18.) MAOIs may cause some side effects similar to those of the other antidepressants.
- T F** 19.) Tricyclics also may interact with thyroid hormone, antihypertensive medications, oral contraceptives, some blood coagulants, some sleeping medications, antipsychotic medications, diuretics, antihistamines, aspirin, bicarbonate of soda, vitamin C, alcohol, and tobacco.
- T F** 20.) The antidepressant effects of monamine oxidase (MAO) inhibitors were first announced by Harry Loomer at a meeting in Syracuse, New York in 1987.

GRADE THIS ONLINE COURSE! – Page 3

It is helpful to us if you return this form via snail mail or fax with your Quiz. Thank-you!

Participant Assessment of Home Study CEU Course

MEDICATIONS AND MENTAL ILLNESS

3 Credit Hours

**Please Rate the Following Statements from 1-5
(1 being the Lowest, 5 being the Highest.)**

- _____ 1. I found the PeachTree Online Home Study Course Instructions simple to follow.
- _____ 2. I found the PeachTree Online Home Study Course materials to be of professional quality, and easy to read.
- _____ 3. I found the PeachTree Online Home Study Course materials to be of educational value, relative, and useful to my counseling practice.
- _____ 4. I completed the 3 Hour PeachTree Online Home Study Course in approximately 3 hours.
- _____ 5. I would take another PeachTree Online Home Study Course, and/or recommend them to a co-worker.

ADDITIONAL COMMENTS: