

Understanding Antidepressant Medications

Depression affects about 121 million people worldwide and is a leading cause of disability, according to the World Health Organization (WHO).

“In my experience as a practicing psychiatrist, I’ve seen that many people with depression don’t realize that they have the condition or that it’s treatable,” says Mitchell Mathis, M.D., deputy director of the Division of Psychiatry Products at the Food and Drug Administration (FDA).

Some who suffer from depression don’t recognize the symptoms, or they attribute them to lack of sleep or a poor diet. Others realize they are depressed, but they feel too fatigued or ashamed to seek help.

Not all depression requires treatment with medication.



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It’s important to communicate how you are feeling so that your physician can evaluate the medication’s effectiveness.

“Studies have shown that the best way to treat a patient with the more severe form of major depressive disorder is through both therapy and prescribed antidepressant medication,” Mathis says. “They work best in combination with one another.”

Diagnosing the Disease

Medical professionals generally base a diagnosis of major depressive disorder on the presence of certain symptoms listed in the American Psychiatric Association’s *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition*. Diagnosis depends on the number, severity, and duration of these symptoms:

- depressed mood
- loss of interest or pleasure in almost all activities
- changes in appetite or weight
- disturbed sleep
- slowed or restless movements
- fatigue, loss of energy
- feelings of worthlessness or excessive guilt
- trouble in thinking, concentrating, or making decisions
- recurring thoughts of death or suicide

Types of Antidepressants

Antidepressants work to normalize naturally occurring brain chemicals called neurotransmitters—primarily serotonin, norepinephrine, and dopamine. Scientists have found that these particular chemicals are involved in regulating a person’s mood.

There are several different classifications of antidepressants:

- Selective Serotonin Reuptake Inhibitors (SSRIs): Examples are Prozac (fluoxetine), Celexa (citalopram), and Paxil (paroxetine).
- Serotonin and Norepinephrine Reuptake Inhibitors (SNRIs): Examples are Effexor (venlafaxine) and Cymbalta

(duloxetine).

- Tricyclic antidepressants (TCAs): Examples are Elavil (amitriptyline), Tofranil (imipramine), and Pamelor (nortriptyline).
- Monoamine Oxidase Inhibitors (MAOIs): Examples are Nardil (phenelzine) and Parnate (tranylcypromine).

There are other antidepressants that don’t fall into any of these classifications and are considered unique, such as:

- Remeron (mirtazapine)
- Wellbutrin (bupropion)

The antidepressant medications in each classification affect different neurotransmitters in particular ways. For example, SSRIs increase the production of serotonin in the brain. MAOIs block monoamine oxidase, an enzyme that breaks down neurotransmitters. Blocking their breakdown means that neurotransmitters remain active in the brain. Research is ongoing to determine antidepressants’ exact mechanism of action on a person’s brain.

Selecting Antidepressants

So how does a physician determine which antidepressant to prescribe? Doctors typically use a patient history and a mental status exam. With this information, the doctor can evaluate symptoms, rule out medical causes of depression, and decide if the criteria are met for major depressive disorder.

“In my opinion, it’s best when anti-

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depressant medications are personalized,” says Mathis. “For example, some depressed people have difficulty sleeping. So they would benefit from a more sedating antidepressant at night. Other people with depression sleep too much and would benefit from a more activating antidepressant in the morning.”

It’s important to communicate how you are feeling so that your physician can evaluate the medication’s effectiveness.

Effectiveness of Antidepressants

Approximately 60 to 70 percent of patients respond to the first antidepressant that is prescribed or to an increased dosage of that drug, according to Mathis.

But patients must take regular doses of a prescribed antidepressant for at least 3 to 4 weeks before they are likely to experience the full therapeutic effect. And if patients start to feel better, they should not stop taking the antidepressant.

“Even if you start to feel better, you may be in between episodes,” says Mathis. “Depression tends to be chronic and requires everyday treatment just like high blood pressure.”

If you get used to an antidepressant and just quit it, you may experience some withdrawal symptoms such as anxiety and irritability. Worst of all, depression may recur.

Patients should continue taking an antidepressant for 6 to 12 months, or in some cases longer, according to the National Institute of Mental Health (NIMH). This gives medication time to be effective and can help prevent

a relapse of the depression. Patients should carefully follow their doctor's instructions.

Mathis estimates that about 10 percent of depressions are treatment resistant and won't respond to prescribed antidepressants.

That means that 20 to 30 percent of patients may not respond to the first antidepressant that is prescribed for them. NIMH-funded research has shown that patients who did not get well after taking a first medication increased their chances of becoming symptom-free after they switched to a different medication or added another medication to their existing one.

With appropriate treatment, many people with depression experience improvement of their symptoms and return to living normal and productive lives.

Managing Side Effects

All antidepressants come with Medication Guides. These guides provide FDA-approved information for patients, families, and caregivers that could help improve monitoring of a drug's effects. Medication Guides are intended to be distributed at the pharmacy with each prescription or refill of a medication.

Many people who take antidepressants have at least one side effect. Side effects can include:

- Headache
- Night sweats
- Nausea
- Agitation
- Sexual problems
- Dry mouth
- Constipation

Side effects are the most common reason people stop taking antidepressants. It's recommended that you don't stop taking your antidepressants or reduce the dosage without talking to your doctor or mental health professional first.

And there are coping strategies for the most common side effects of

antidepressants. For a more complete list of side effects and suggested coping strategies, visit www.nimh.nih.gov/health/publications/medications/antidepressant-medications.shtml

Serious Risks

Suicidal Thinking: In October 2004, FDA directed manufacturers to add a boxed warning to the labeling of all antidepressant medications to alert the public about the increased risk of suicidal thinking or suicide attempts by children and adolescents taking antidepressants.

A boxed warning is the most serious type of warning used on prescription drug labeling. In May 2007, FDA directed that the warning should be extended to include young adults up through age 24.

More detailed analysis by FDA of antidepressant clinical trials showed an increased risk of suicidality—suicidal thoughts or behavior. "There weren't more actual suicides, but more people under 24 were thinking or talking about it," explains Mathis. "This occurs most often within the first 30 days of an adolescent or young adult starting on an antidepressant."


Mania: When people are in a manic "high," they may be overactive, overly talkative, have a great deal of energy, and need less sleep than normal.

There are two different types of mood disorders, both of which are cyclical. One is unipolar disorder, in which the cycle is that a person feels normal and then feels depressed. The other type is bipolar disorder, in which the person's mood cycles from depressed to normal to manic.

"The doctor needs to screen patients for a bipolar history," said Mathis. If an antidepressant is prescribed to a person with bipolar disorder, it can cause mania. And the person can even become psychotic if the mania is severe.

Birth Defects: In December 2005, FDA changed Paxil (paroxetine) from a pregnancy risk category of C to D.

With a Category C drug, fetal risk can't be ruled out. With a Category D drug, positive evidence of fetal risk exists. FDA chooses a medicine's letter category based on what is known about the medicine when used in pregnant women and animals.

High Blood Pressure: It can be much more difficult for patients to take one of the MAOIs for depression because of the many dietary and medicinal restrictions that must be followed. People taking MAOIs must avoid certain foods that contain high levels of the chemical tyramine, which is found in many cheeses, wines and pickles, and some medications including decongestants. MAOIs interact with tyramine in such a way that may cause a sharp increase in blood pressure, which could lead to a stroke or other complications. 

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For More Information

Antidepressant Use in Children, Adolescents, and Adults
www.fda.gov/cder/drug/antidepressants/default.htm

National Institute of Mental Health (NIMH)
www.nimh.nih.gov/