



Psychotropic Drugs

A psychotropic describes any drug that affects behavior, mood, thoughts, or perception. It is an umbrella term for a lot of different drugs, including prescription drugs and commonly misused drugs. The Substance Abuse and Mental Health Services Administration (SAMHSA) National Survey on Drug Use and Health data found that in 2018, 47 million adults over age 18 reported a mental health condition. This is around 1 in 5 adults in the United States. More than 11 million reported serious mental illness. Mental health and well-being affect our daily lives. Psychotropic medications can be an important part of the tools available to help keep us well.

Fast facts about psychotropic drugs:

- Psychotropics are a broad category of drugs that treat many different conditions.
- They work by adjusting levels of brain chemicals, or neurotransmitters, like dopamine, gamma aminobutyric acid (GABA), norepinephrine, and serotonin.
- There are five major classes of legal psychotropic medications:
 - anti-anxiety agents
 - antidepressants
 - antipsychotics
 - mood stabilizers
 - stimulants
- Some can cause serious side effects and have special monitoring requirements by healthcare providers.

Why are psychotropic drugs prescribed?

Some conditions psychotropics treat include:

- anxiety

- depression
- schizophrenia
- bipolar disorder
- sleep disorders

These medications work by altering neurotransmitters to improve symptoms. Each class works a bit differently, but they have some similarities, too. The type or class of medication a doctor prescribes depends on the individual and specific symptoms. Some medications require regular use for several weeks to see benefits.

Always talk to your doctor about the specific symptoms you are experiencing. They will find the best treatment options available to help you feel better. This includes nonmedication options, such as cognitive behavioral therapy. Some medications, such as antipsychotic medications, may take up to 2 weeks to help with symptom relief. It is important to give the medicine a chance to work before stopping it.

Anti-anxiety agents

Anti-anxiety agents, or anxiolytics, can treat different types of anxiety disorder, including social phobia related to public speaking. They can also treat:

- sleep disorders
- panic attacks
- stress

How they work

This class is known as benzodiazepines (BZD). They are recommended for short-term use. BZDs work by increasing GABA levels in the brain, which causes a relaxing or calming effect. They have serious side effects, including dependence and withdrawal.

Side effects

Side effects of BZDs include:

- dizziness
- drowsiness
- confusion
- loss of balance

- memory problems
- low blood pressure
- slow breathing

Caution

These medications may be habit-forming if used long term. They are not recommended for more than a few weeks.

SSRI Antidepressants

SSRIs are mainly used to treat different types of depression. Among them are major depressive disorder and bipolar disorder. Depression is more than feeling sad for a few days. It is persistent symptoms that last for weeks at a time. You may also have physical symptoms, like sleep issues, lack of appetite, and body aches. SSRIs work by increasing the amount of serotonin available in the brain. SSRIs are the first choice of treatment for many types of depression.

SSRI antidepressants include:

- citalopram (Celexa)
- escitalopram (Lexapro)
- paroxetine (Brisdelle, Paxil, Pexeva)
- fluoxetine (Prozac)
- fluvoxamine
- sertraline (Zoloft)

SSRIs are the most common choice for treating MDD, but they can also help with:

- generalized anxiety disorder.
- panic disorder
- social anxiety disorder
- premenstrual dysphoric disorder
- post-traumatic stress disorder
- obsessive-compulsive personality disorder
- hot flashes

Side effects

Side effects of SSRIs include:

- dry mouth
- nausea
- vomiting
- diarrhea
- poor sleep
- weight gain
- sexual disorders

Caution

Some SSRIs can cause elevated heart rate. Some can increase your risk for bleeding if you are also using blood thinning medications, such as nonsteroidal anti-inflammatory drugs like aspirin or warfarin (Coumadin, Jantoven).

SNRI Antidepressants

SNRI antidepressants include:

- desvenlafaxine (Khedezla, Pristiq)
- duloxetine (Cymbalta)
- levomilnacipran (Fetzima)
- milnacipran (Savella)
- venlafaxine (Effexor XR)

SNRIs are often used to treat depression, but they can also help with:

- nerve damage caused by diabetes
- fibromyalgia
- generalized anxiety disorder
- hot flashes

How they work

SNRIs help treat depression but work a bit differently than SSRIs. They increase both dopamine and norepinephrine in the brain to improve symptoms. SNRIs might work better in some people if SSRIs haven't brought improvement.

Side effects

Side effects of SNRIs include:

- headache
- dizziness
- dry mouth
- nausea
- agitation
- sleep problems
- appetite issues

Caution

These drugs can increase blood pressure and heart rate. Your liver function must be monitored while on these medications as well.

MAOI Antidepressants

Some common MAOIs include:

- isocarboxazid (Marplan)
- phenelzine (Nardil)
- tranylcypromine (Parnate)
- selegiline (Eldepryl, Emsam)

These drugs are older and are not used very often today.

How they work

MAOIs improve symptoms of depression by increasing dopamine, norepinephrine, and serotonin levels in the brain.

Side effects

Side effects of MAOIs include:

- nausea

- vomiting
- dizziness
- diarrhea
- dry mouth
- weight gain

Caution

MAOIs taken with certain foods that have the chemical tyramine can increase blood pressure to dangerous levels. Tyramine is found in many kinds of cheese, pickles, and some wines.

Tricyclic Antidepressants

Some common TCAs include:

- amitriptyline (Elavil)
- clomipramine (Anafranil)
- desipramine (Norpramin)
- doxepin
- imipramine (Tofranil)
- nortriptyline (Pamelor)

In addition to treating depression, many TCAs are used for other conditions, including:

- nerve pain caused by shingles
- nerve damage caused by diabetes
- social anxiety disorder
- fibromyalgia
- migraine headache
- bedwetting in children

These are one of the oldest classes of antidepressants still available on the market. They are reserved for use when newer medications have not been effective. Tricyclics increase the amount of serotonin and norepinephrine in the brain to improve mood. Doctors also use tricyclics off-label to treat other conditions. Off-label use means a drug is used for a condition that does not have Food and Drug Administration (FDA) approval for that condition.

Off-label uses for tricyclics include:

- panic disorder
- migraine
- chronic pain
- obsessive-compulsive disorder

Side effects

Side effects include:

- dry mouth
- dizziness
- drowsiness
- nausea
- weight gain

Caution

Certain groups should avoid tricyclics. This includes people with:

- glaucoma
- enlarged prostate
- thyroid issues
- heart problems

These medications can raise blood sugar. If you have diabetes, you may have to carefully monitor your sugar levels.

Typical Antipsychotics

These drugs treat symptoms associated with schizophrenia. They may also be used for other conditions. Typical antipsychotics block dopamine in the brain. The first antipsychotic drug in this class, chlorpromazine, was introduced more than 60 years ago. It is still in use today.

Side effects

Side effects of antipsychotic drugs include:

- blurred vision
- nausea
- vomiting
- trouble sleeping
- anxiety
- drowsiness
- weight gain
- sexual problems

Caution

This class of drugs causes movement-related disorders called extrapyramidal side effects. These can be serious and long lasting. They include:

- tremors
- uncontrolled facial movements
- muscle stiffness
- problems moving or walking.

Atypical Antipsychotics

These are the next generation of medications used to treat schizophrenia.

How they work

These drugs work by blocking brain chemicals dopamine D2 and serotonin 5-HT2A receptor activity.

Doctors also use atypical antipsychotics to treat symptoms of:

- bipolar disorder
- depression
- Tourette syndrome

Side effects

Atypical antipsychotics have some serious side effects. These include an increased risk of:

- diabetes
- high cholesterol levels
- heart muscle–related problems
- involuntary movements, including muscle spasms, tremors
- stroke

Side effects of atypical antipsychotics include:

- dizziness
- constipation
- dry mouth
- blurred vision
- weight gain
- sleepiness

Caution

Aripiprazole (Abilify), clozapine (Clozaril), and quetiapine (Seroquel) have a black box warning for specific safety concerns. There is a risk of suicidal thoughts and behaviors in people under the age of 18 who take one of these medications.

Serotonin antagonist and reuptake inhibitors (SARIs)

SARIs are also known as serotonin modulators or phenylpiperazine antidepressants. They're sometimes considered atypical antidepressants because they work differently. SARIs can help treat:

- depression
- anxiety
- panic disorder

Like most other antidepressants, SARIs help to increase the amount of available serotonin — and sometimes other neurotransmitters — in your brain. But they do so in different ways from other antidepressants.

Some SARIs include:

- nefazodone

- trazodone (Oleptro)

Common side effects

The more common side effects of SARIs include:

- drowsiness
- dry mouth
- headaches
- dizziness
- nausea
- fatigue
- vomiting
- blurred vision
- diarrhea
- constipation
- low blood pressure
- confusion

Many people taking SARIs experience drowsiness or sleepiness. This makes them a potentially good option for people with insomnia, especially if they also have depression.

Mood stabilizers

Doctors use these drugs to treat depression and other mood disorders, like bipolar disorder.

How they work

The exact way mood stabilizers work isn't well understood yet. Some researchers believe these medications calm specific areas of the brain that contribute to the mood changes of bipolar disorder and related conditions.

Side effects

Side effects of mood stabilizers include:

- dizziness

- nausea
- vomiting
- tiredness
- stomach problems

Caution

The kidneys remove lithium from the body, so kidney function and levels of lithium must be regularly checked. If you have poor kidney function, your doctor may need to adjust your dose.

Stimulants

These drugs mainly treat attention deficit hyperactivity disorder (ADHD).

How they work

Stimulants increase dopamine and norepinephrine in the brain. The body can develop dependence if used long term.

Side effects

Side effects of stimulants include:

- problems with sleep
- poor appetite
- weight loss

Caution

Stimulants can increase heart rate and blood pressure. They may not be the best option if you have heart or blood pressure problems.

Risks and black box warnings for psychotropics

The FDA requires boxed warnings for certain medications or classes of medications. These can be for three main reasons:

1. The risk of a dangerous adverse reaction must be weighed over its benefits before use.

2. A dose adjustment might be needed for safe prescribing.
3. A specific group of people, such as children or pregnant women, might need special monitoring for safe use.

Here are a few drugs and classes with boxed warnings. This is not a full list of warnings. Always ask your doctor or pharmacist about specific drug side effects and risks:

- Aripiprazole (Abilify) and quetiapine (Seroquel) are not FDA approved for use in anyone under age 18 due to the of risk suicidal thoughts and behavior.
- Antipsychotic medication use in older adults with dementia-related psychosis can increase the risk of death.
- Antidepressants can worsen suicidal thoughts and behavior in children and adolescents.
- Stimulant drugs may cause dependence and addiction.
- Benzodiazepines taken with opioid medications can increase the risk of overdose.
- Clozapine (Clozaril) can cause agranulocytosis, a serious blood disorder. You need to have blood work done to monitor your white blood cell count. It can also cause seizures as well as heart and breathing problems, which can be life threatening.

Drug interactions

Psychotropic drugs have many interactions with other drugs, food, alcohol, and over the counter (OTC) products. Always tell your doctor and pharmacist all the medications and supplements you are taking to avoid adverse reactions.

Stimulant drugs like amphetamine interact with:

- SSRIs
- SNRIs
- MAOIs
- tricyclics
- lithium

Combining these drugs can cause a serious reaction called serotonin syndrome. If you need to take both types of medications, your doctor will modify the doses to avoid adverse interactions.

Legal issues surrounding psychotropic drugs.

BZDs and stimulants are controlled substances because they can cause dependence and have the potential for misuse.

Never share or sell your prescription medications. There are federal penalties for selling or illegally buying these medications.

These medications can also cause dependence and lead to substance use disorders.

For support and to learn more about substance use disorders, reach out to these organizations:

- Narcotics Anonymous (NA)
- National Institute on Drug Abuse (NIDA)
- Substance Abuse and Mental Health Services Administration (SAMHSA)

The bottom line

Psychotropics cover an exceptionally large category of drugs that are used to treat many different types of symptoms.

They all work by adjusting neurotransmitter levels to help you feel better.

The medication your doctor prescribes depends on many factors, like your age, other health conditions you may have, other medications you are using, and your past medication history.

Not all medications work right away. Some take time. Be patient and talk to your doctor if your symptoms are getting worse.

Discuss all treatment options, including cognitive behavioral therapy, with your healthcare provider to develop the best care plan for you.

Suicide prevention

If you think someone is at immediate risk of self-harm or hurting another person:

- Call 911 or your local emergency number.
- Stay with the person until help arrives.
- Remove any guns, knives, medications, or other things that may cause harm.
- Listen, but do not judge, argue, threaten, or yell.

If you or someone you know is considering suicide, get help from a crisis or suicide prevention hotline. Try the National Suicide Prevention Lifeline at 800-273-8255.

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