

# WHAT IS SCHIZOAFFECTIVE DISORDER?



## BASIC FACTS • SYMPTOMS • FAMILIES • TREATMENTS



Mental Illness Research, Education and Clinical Center  
VA Desert Pacific Healthcare Network  
Long Beach VA Healthcare System  
Education and Dissemination Unit 06/116A  
5901 E. 7th street | Long Beach, CA 90822

# basic facts

Schizoaffective disorder is a chronic and treatable psychiatric illness. It is characterized by a combination of 1) psychotic symptoms, such as those seen in schizophrenia and 2) mood symptoms, such as those seen in depression or bipolar disorder. It is a psychiatric disorder that can affect a person's thinking, emotions, and behaviors and can impact all aspects of daily living, including work, school, social relationships, and self-care.

Schizoaffective disorder is considered a psychotic disorder because of its prominent features of hallucinations and delusions. Therefore, people with this illness have periods when they have difficulty understanding the reality around them. They may hear voices other people don't hear. They may have unusual thoughts and suspicions, such as believing that other people can read their minds, control their thoughts, or plot to harm them. These experiences can terrify people with the illness and make them withdraw and/or become agitated. Some individuals with this illness also lack expressiveness, have low motivation, are unable to experience pleasure, and do not show an interest in social relationships. In addition to these symptoms, nearly all people with schizoaffective disorder have some impairments in their memory, attention, and decision-making ability.

In addition to psychotic symptoms, individuals with schizoaffective disorder also experience mood episodes. While some people only experience symptoms of depression or mania, others experience both types of symptoms. The ups and downs experienced by someone with schizoaffective disorder are very different from the normal ups and downs that most people experience from time to time. Changes in mood can last for hours, days, weeks, or months. In between these extremes, the person's mood may be normal.

Families and society are affected by schizoaffective disorder as well. Symptoms may result in poor social functioning and poor job or school performance. Many people with schizoaffective disorder have difficulty holding a job or caring for themselves, so they rely on others for help. There are treatments that help improve functioning and relieve many symptoms of schizoaffective disorder. Recovery is possible! A combination of helpful therapies, education in managing one's illness, and supports to provide assistance and encouragement can lead to experiencing fewer symptoms, improving relationships with other people, and achieving meaningful and fulfilling life goals.

*Schizoaffective disorder is characterized by a combination of psychotic and mood symptoms and can affect a person's thinking, emotions, and behaviors.*

## Prevalence

Although the exact prevalence of schizoaffective disorder is not clear, experts estimate that it ranges from 0.2% to 0.5%. Schizoaffective disorder is more common in woman than in men. Individuals with a first degree relative (e.g., parent or sibling) with schizophrenia, bipolar disorder, or schizoaffective disorder are at increased risk of developing schizoaffective disorder, compared to someone with no family history of these disorders.

*Less than 1% of the population will develop schizoaffective disorder in their lifetime.*

## Causes

There is no simple answer to what causes schizoaffective disorder because several factors play a part in the onset of the disorder. These include a genetic or family history of schizoaffective disorder, schizophrenia, or bipolar disorder, biological factors, environmental stressors, and stressful life events.

Research shows that the risk of schizoaffective disorder results from the influence of genes acting together with biological and environmental factors. A family history of schizoaffective disorder does not necessarily mean children or other relatives will develop the disorder. However, studies have shown that schizoaffective disorder does run in families, and a family history of schizoaffective disorder, schizophrenia, or bipolar disorder is one of the strongest and most consistent risk factors for the disorder.

In terms of biological factors, an imbalance of the neurotransmitters dopamine, glutamate, norepinephrine, and serotonin is also linked to schizoaffective disorder. Neurotransmitters are brain chemicals that communicate information throughout the brain and body. However, the exact role of these neurotransmitters in schizoaffective disorder is unclear.

In addition to genetic and biological factors, others believe that environment also plays a key role in whether someone will develop schizoaffective disorder. Some of the environmental factors believed to be linked to schizophrenia-spectrum disorders, including schizoaffective disorder, are malnutrition, maternal illness or exposure to toxins before birth, obstetric complications, poverty, and substance use. Cannabis use, especially before age 15, has also been identified as a risk factor in developing psychotic symptoms. Stressful life events, such as family conflict, early parental loss or separation, and physical or sexual abuse, are also associated with schizophrenia-spectrum disorders.

*Scientists believe that schizoaffective disorder is caused by several factors, including a family history of psychotic or bipolar disorders, biological factors, environmental factors, and stressful life events.*

## Course of Illness

Schizoaffective disorder usually begins in late adolescence or early adulthood, often between the ages of 16 and 30. The initial symptoms of the disorder can vary greatly – the onset of psychotic symptoms may be abrupt or gradual, and they might present before or after the onset of mood symptoms. Schizoaffective disorder with manic symptoms appears to be more common in young adults, while schizoaffective disorder with depressive symptoms alone appears to be more common in older adults.

The course of schizoaffective disorder over time varies considerably and may require hospitalization. Most people experience periods of symptom exacerbation and remission, while others are more chronically ill and maintain a steady level of moderate to severe symptoms and disability over time. Some individuals have a milder course of the illness. Although the disorder is often lifelong, symptoms tend to improve over the person's life.

*Schizoaffective disorder usually begins in late adolescence or early adulthood. Most people experience periods of symptom exacerbation and remission, while others are more chronically ill.*

# symptoms of schizoaffective disorder

A person with schizoaffective disorder experiences mood symptoms at the same time they experience psychotic symptoms, but they also experience psychotic symptoms even during periods in which their mood is relatively normal. The person will be diagnosed with either schizoaffective disorder (depressive type) or schizoaffective disorder (bipolar type). The depressive type is diagnosed in those who have experienced a major depressive episode only with no history of mania. The bipolar type is diagnosed in those who have experienced a manic episode during the course of their illness. A major depressive episode also may have occurred, but it is not required for this subtype. This handout describes psychotic, mood, and cognitive symptoms that are seen in schizoaffective disorder. To be diagnosed with schizoaffective disorder, the symptoms a person experiences must be severe enough to impair social, work, or other areas of functioning.

**PSYCHOTIC SYMPTOMS:** The five key features of psychotic disorders are described here. The symptoms of psychotic disorders are generally categorized as positive symptoms or negative symptoms. Positive symptoms refer to thoughts, perceptions, and behaviors that are present in people with psychotic disorders but are ordinarily absent in other people. They include symptoms such as hallucinations and delusions. These symptoms can come and go. Sometimes they are severe, and sometimes they are hardly noticeable. Conversely, negative symptoms are the absence of thoughts, perceptions, or behaviors that are ordinarily present in other people. These symptoms are often stable throughout much of a person's life.

1) **Hallucinations.** Hallucinations are false perceptions. A person may hear, see, feel, smell, or taste things that are not actually there.

- **Auditory:** Hearing things that other people cannot hear. Many people with this disorder hear voices. The voices may talk to the person about their behavior, order them to do things, or warn them of danger. Sometimes the voices talk to each other. This is the most common type of hallucination.
- **Visual:** Seeing things that are not there or that other people cannot see.
- **Tactile:** Feeling things that other people do not feel or feeling like something is touching one's skin that is not there.
- **Olfactory:** Smelling things that other people cannot smell, or not smelling the same thing that other people do smell.
- **Gustatory experiences:** Tasting things that are not there.

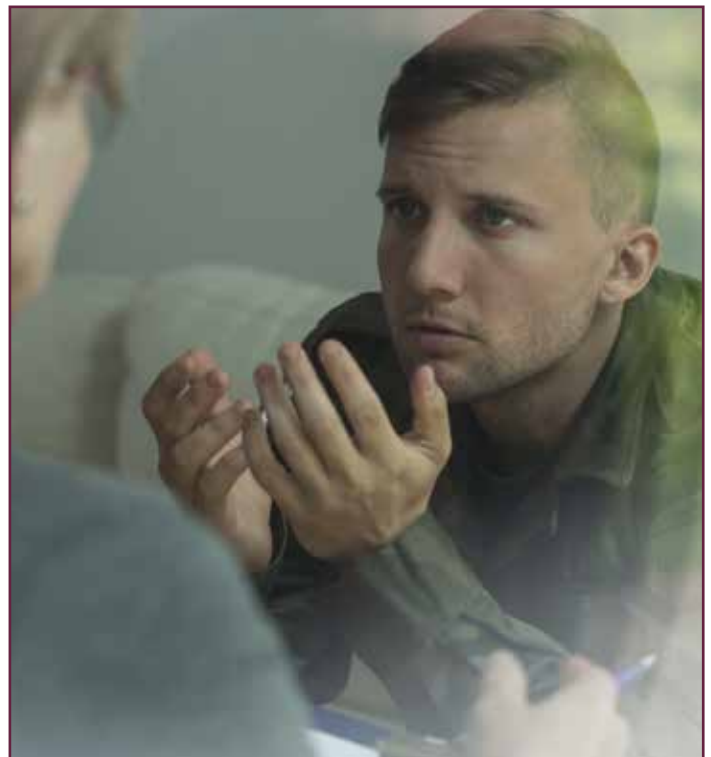
2) **Delusions.** Delusions are false beliefs that are held in spite of overwhelming evidence against them. People hold these beliefs strongly and usually cannot be "talked out" of them. The content of the delusions may include a variety of themes. Some examples include:

- **Delusions of persecution:** The belief that the individual (or someone close to them) is being plotted or discriminated against, spied on, threatened, attacked, or deliberately victimized.
- **Referential delusions:** When an individual attaches special personal meaning to actions of others or to various objects and events when there is no information to confirm this. The person may believe that certain gestures, comments, or other environmental cues are specifically directed at him or her, or it may seem as if special personal messages are being communicated to them through the TV, radio, or other media.

- **Somatic delusions:** False beliefs about one's body. For example, that a terrible physical illness exists or that something foreign is inside or passing through one's body.
- **Delusions of grandeur:** Believing one is very special or has special powers or abilities. For example, a person might think they are a famous rock star.
- **Delusions of control:** The belief that one's feelings, thoughts, and actions are being controlled by other people.

3) **Disorganized thinking and speech.** This is when a person has trouble organizing his or her thoughts or connecting them logically. They may string words together in an incoherent way that is hard to understand, often referred to as a "word salad." The person may make "loose associations," where they rapidly shift from one topic to an unrelated topic, making it very difficult to follow their conversation. A person may experience "thought blocking" and stop speaking abruptly in the middle of a thought. When asked why they stopped talking, the person may say that it felt as if the thought had been taken out of their head. A person might make up meaningless words, or "neologisms," or perseverate which means to persistently repeat words or ideas. This category of symptoms is sometimes referred to as a thought disorder.

4) **Grossly disorganized behavior or catatonic behavior.** Disorganized behaviors include bizarre behaviors, unpredictable or inappropriate responses, and lack of inhibition or impulse control. Disorganized behavior may also appear as a decline in overall daily functioning. The person may do bizarre things that are socially inappropriate, or they may have a hard time taking care of their basic needs, such as bathing, dressing properly, and even eating regularly. Catatonia can range in severity. In its severe form, a person may be unresponsive to other people, maintain rigid body postures, or not move. On the other hand, it could be characterized by excessive or agitated body movement. Catatonia is rare today.





# symptoms of schizoaffective disorder (cont'd)

5) **Negative Symptoms.** Negative symptoms are the absence of thoughts, perceptions, or behaviors that are ordinarily present in other people. A number of different symptoms fall into this category:

- **Affective flattening:** Affective flattening is characterized by a reduction in the range of emotional expressiveness, including limited or unresponsive facial expression, poor eye contact, and decreased body language. The expressiveness of the person's face, voice tone, and gestures may be reduced or restricted. However, this does not mean that the person is not reacting to his or her environment or having feelings.

- **Alogia:** Alogia, or poverty of speech, is the lessening of speech fluency and productivity. The person may have difficulty or be unable to speak and may give short, empty replies to questions.

- **Avolition:** Avolition is the difficulty or inability to begin and persist in goal-directed behavior. It is often mistaken for apparent disinterest. The person may not feel motivated to pursue goals and activities. They may have little sense of purpose in their lives and have few interests. They may feel lethargic or sleepy, and have trouble following through on even simple plans.

- **Anhedonia:** Anhedonia is the inability to experience pleasure from activities one used to find enjoyable. For example, the person may not enjoy watching a sunset, going to the movies, or having close relationships with other people.

**DEPRESSIVE SYMPTOMS:** In schizoaffective disorder, a depressive episode is a period during which a person feels depressed most of the day, nearly every day, for at least two weeks. The person must also experience at least four of these symptoms:

- Loss of interest or pleasure in things once found to be enjoyable

- Significant weight loss when not dieting, weight gain, or a decrease or increase in appetite

- Insomnia or hypersomnia (difficulty falling asleep or staying asleep, waking early in the morning and not being able to get back to sleep, or sleeping excessively)

- Psychomotor agitation (e.g., inability to sit still or pacing) or psychomotor retardation (e.g., slowed speech, thinking, and body movements)

- Fatigue or loss of energy

- Feelings of worthlessness or excessive or inappropriate guilt

- Decreased ability to think or concentrate, or indecisiveness
- Recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, a specific plan for committing suicide, or a suicide attempt

**MANIC SYMPTOMS:** A manic episode is a period during which a person feels extremely happy or irritable and has increased energy most of the day, nearly every day, for at least one week (less if hospitalized). The person must also experience at least three of these symptoms (four if the mood is only irritable):

- Inflated self-esteem or grandiosity (has a high opinion of self and may be unrealistic about their abilities)

- Decreased need for sleep (e.g., feels rested after only 3 hours of sleep)

- More talkative than usual or pressure to keep talking

- Flight of ideas or racing thoughts (has too many thoughts at the same time or rapid speech that jumps from topic to topic)

- Distractibility (attention is easily drawn to unimportant or irrelevant things)

- Increased goal-directed activities (e.g., social, sexual, or at work or school) or psychomotor agitation (purposeless non-goal-directed activity)

- Excessive involvement in activities with a high potential for painful consequences (e.g., shopping sprees, driving recklessly, and unsafe sex)

**COGNITIVE SYMPTOMS:** Although cognitive symptoms are not part of the diagnosis for schizoaffective disorder, nearly all individuals with the disorder experience some cognitive impairment. Cognition refers to mental processes that allow us to perform day-to-day functions, such as the ability to pay attention, to remember, and to solve problems. Cognitive impairments are considered a core feature of schizoaffective disorder and contribute to difficulties in work, social relationships, and independent living. Some examples of cognitive symptoms include trouble concentrating or paying attention, poor memory, slow thinking, and difficulties planning, solving problems, and grasping abstract concepts.

*Individuals with schizoaffective disorder experience psychotic symptoms as well as mood symptoms. Cognitive symptoms are also very common.*

## diagnosis

Schizoaffective disorder is a psychiatric disorder that must be diagnosed by a trained mental health professional. Diagnostic interviews and medical evaluations are used to determine the diagnosis. There are currently no physical or lab tests that can diagnose schizoaffective disorder, but they can help rule out other medical or mental health conditions that sometimes have similar symptoms. To make the diagnosis, a trained mental health professional conducts a comprehensive interview and pays careful attention to the symptoms experienced, the severity of the symptoms, how long they have lasted, and which symptoms have overlapped in time.

The fact that this diagnosis includes features of both psychotic and mood disorders means that making an accurate diagnosis can be challenging. Individuals with schizoaffective disorder may be misdiagnosed with having another psychotic disorder, such as

schizophrenia, schizophreniform disorder, brief psychotic disorder, or delusional disorder. Alternatively, they may be misdiagnosed with a mood disorder, such as major depression or bipolar disorder. The diagnosing clinician must also make sure symptoms are not due to a general medical condition and are not the direct result of drug use, medication, or toxin exposure. Therefore, a careful and thorough interview is needed to prevent misdiagnosis from occurring. It is useful to collect information from relatives and friends who have observed the individual's behaviors and moods.

*Schizoaffective disorder is a psychiatric disorder that must be diagnosed by a trained mental health professional. The symptoms of schizoaffective disorder may overlap with symptoms of other psychiatric disorders.*

# how family members can help

The family environment is very important in the recovery of individuals with schizoaffective disorder. Even though the disorder can be a frustrating illness, family members can help the process of recovery in many ways.

## Encourage Treatment and Rehabilitation

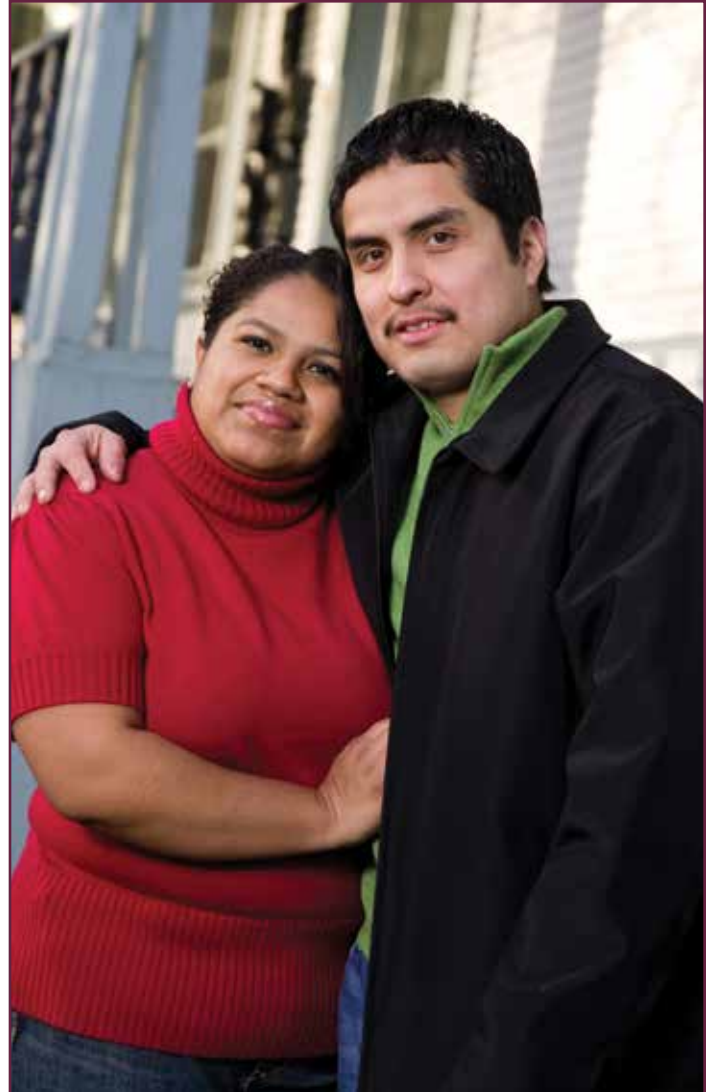
Medications and psychotherapy can help a person feel better, engage in meaningful activities, and improve their quality of life. The first step is to visit a doctor for a thorough evaluation. If possible, it is often helpful for family members to be present at the evaluation to offer support, help answer the doctor's questions, and learn about the illness. If medication is prescribed, family members can provide support in regularly taking those medications. Taking medication can be difficult – there will be times when an individual with schizoaffective disorder may not want to take it or may just forget to take it. Encouragement and reminders are helpful. Family members can help the person fit taking medication into their daily routine. An individual with schizoaffective disorder may also be referred to psychosocial treatment and rehabilitation. Family members can be very helpful in supporting treatment attendance. Some ways to encourage therapy attendance are giving reminders, offering support, and providing transportation to the clinic.

## Provide Support

Family stress can contribute to symptom relapses. Conversely, family support can help people cope with stress and decrease the risk of relapse. Helping an individual with schizoaffective disorder pursue goals and activities that are important to them can be very beneficial in the process of recovery. It is best if family members try to be understanding rather than critical, negative, or blaming. It may be difficult at times, but families often do best when they are patient and appreciate any progress that is being made, however slow it may be. If family members have difficulty being supportive, it may be because of what they believe is causing the disorder.

Family members try to make sense of psychotic disorders by understanding its causes. Some families think that psychotic disorders are caused by an individual's personal weaknesses or moral failings (e.g., the individual is weak, lazy, or lacking self-discipline), whereas others believe the causes are purely biological (i.e., it is a medical illness). The belief that the disorder is caused by moral weakness, laziness, or lack of self-discipline leads family members to believe that individuals with schizoaffective disorder are able to control their symptoms. The belief that people have control over, and as a result are responsible for their symptoms, can lead to feelings of anger and may prevent family members from being supportive of their ill relative. In contrast, the belief that schizoaffective disorder is a medical illness may lead family members to believe that the symptoms are not controllable, and therefore individuals are not responsible for their symptoms. This leads to greater feelings of warmth and sympathy and a greater willingness to help. Research has shown that family members who hold a medical view of the disorder are less critical of their relative than those who hold a moral view of the disorder. Family members' views on what causes schizoaffective disorder are important because critical and hostile attitudes have been shown to be predictive of relapse.

Although the medical view of the disorder is more accurate, it may increase feelings of hopelessness because people feel like there is nothing that can be done. However, like other medical problems, there are effective medications that have been developed that reduce many symptoms. Also, the disorder is not purely biological. The course of the disorder is impacted by environmen-



tal and protective factors as well. Therefore, people's lives can improve by reducing their stress and increasing their coping skills. Psychosocial therapies can help with these efforts. Understanding the complexity of the causes involved can help family members be more supportive while remaining hopeful that recovery is possible.

## Take Care of Themselves

Family members often feel guilty about spending time away from their ill relative; however, it is important that they take good care of themselves. There are many ways to do this. Family members should not allow their ill relative to monopolize their time. Spending time alone or with other family members and friends is important for their own well-being. Family members may also consider joining a support or therapy group. Counseling can often help family and friends better cope with a loved one's illness. Finally, family members should not feel responsible for solving their relative's problems themselves. They can't. They should get the help of a mental health professional if needed.

*Family members can help the process of recovery from schizoaffective disorder in many ways. Some ways include encouraging and helping with treatment, providing support, understanding the cause of the disorder, and taking care of themselves.*

There are a variety of medications and therapies available to those suffering from schizoaffective disorder. Medications can help reduce symptoms and are recommended as the first-line treatment for schizoaffective disorder. Antipsychotic medications, mood stabilizers, and antidepressant medications can be helpful in managing symptoms (see pages 8-11). Additionally, individuals with schizoaffective disorder can learn to manage their symptoms and improve their functioning with psychosocial treatment and rehabilitation. The treatments listed here are ones which research has shown to be effective for people with severe mental illness. They are considered to be evidence-based practices.

## Psychoeducation

Psychoeducation provides individuals with information about their illness and the most effective ways of treating symptoms and preventing relapse. Psychoeducation covers topics such as the nature and course of schizoaffective disorder, the importance of active involvement in treatment, the potential benefits and adverse effects of various treatment options, identification of early signs of relapse, and behavior changes that reduce the likelihood of relapse.

## Social Skills Training

Many people with schizoaffective disorder have difficulties with social skills. Social skills training (SST) aims to correct these deficits by teaching skills to help express emotion and communicate more effectively, so individuals are more likely to achieve their goals, develop relationships, and live independently. Social skills are taught in a very systematic way using behavioral techniques, such as modeling, role playing, positive reinforcement, and shaping.

## Family-Based Services

Mental illness affects the whole family. Family services teach families to work together toward recovery. In family-based services, the family and clinician meet to discuss problems the family is experiencing. Families then attend educational sessions where

they learn basic facts about mental illness, coping skills, communication skills, problem-solving skills, and ways to work with one another toward recovery. Patients who participate in family interventions experience fewer psychiatric symptoms and relapses, improved treatment adherence, and improved family functioning. There is a range of family programs available to fit the specific needs of each family. Some families benefit from just a few sessions, while more intensive services are especially helpful for families that are experiencing high levels of stress and tension, and for individuals who are chronically symptomatic or prone to relapse. Generally, these longer-term interventions last six to nine months and can be conducted in single family or multi-family formats.

## Illness Self-Management

Components of illness self-management include psychoeducation, teaching coping skills to manage stress and symptoms, relapse prevention, and social skills training. Individuals learn about their psychiatric illness, their treatment choices, medication adherence strategies, and coping skills to deal with stress and symptoms. Relapse prevention involves recognizing situations that might trigger symptoms, tracking warning signs and symptoms of relapse, and developing a plan to cope with triggers and warning signs to prevent relapse. This treatment approach also teaches individuals

## Cognitive Behavioral Therapy (CBT)

Cognitive behavioral therapy (CBT) is a blend of two therapies: cognitive therapy and behavioral therapy. Treating schizoaffective disorder with CBT is challenging, but research has shown that CBT, as an add-on to medication, can help a person better cope with their illness. CBT can be done one-on-one or in a group setting.

Cognitive therapy focuses on a person's thoughts and beliefs and how they influence a person's mood and actions. CBT aims to change a person's thinking to be more adaptive and healthy. CBT helps individuals learn how to identify maladaptive thoughts, logically challenge them, and replace them with more adaptive thoughts.

Behavioral therapy focuses on a person's actions and aims to change unhealthy behavior patterns. CBT is skill-oriented, and people learn techniques to cope with life's challenges. The therapist teaches problem solving and social skills, as well as skills related to daily functioning. Individuals learn to identify what triggers episodes of the illness, which can reduce the chance of relapse. This can help individuals with schizoaffective disorder minimize the types of stress that can lead to a hospitalization. Individuals will also learn to cope with problematic symptoms. For example, they will learn various coping techniques for dealing with "voices" or other hallucinations, or they will work on scheduling pleasurable activities and becoming more active if depressed.

## Assertive Community Treatment (ACT)

Assertive Community Treatment (ACT) is an approach that is most effective for individuals with the greatest service needs, such as those with a history of multiple hospitalizations or those who are homeless. In ACT, the person receives treatment from an interdisciplinary team of usually 10 to 12 professionals, including case managers, a psychiatrist, several nurses and social workers, vocational specialists, substance abuse treatment specialists, and peer specialists. The team provides coverage 24 hours a day, 7 days a week, and limits caseloads to ensure a high staff to client ratio, usually 1 staff for every 10 clients. Services provided in ACT include case management, comprehensive treatment planning, cri-





sis intervention, medication management, individual supportive therapy, substance abuse treatment, peer support, and a broad range of other rehabilitation services (e.g., supported employment). The VA's version of this program is called Mental Health Intensive Case Management (MHICM).

### **Psychosocial Interventions for Alcohol and Substance Use Disorders**

Many individuals with schizoaffective disorder also struggle with an alcohol or substance use disorder. Co-occurring disorders are best treated concurrently, meaning that treatment for schizoaffective disorder should be integrated with the treatment for the alcohol or drug problem. Integrated treatments includes motivational enhancement and cognitive-behavioral interventions. Integrated treatments are effective at reducing substance use, preventing relapse, and keeping individuals in treatment longer. These interventions can be delivered one-on-one or in a group format.

### **Supported Employment**

Research shows that about 70% of adults with severe mental illness want to work and about 60% can be successfully employed through supported employment. Supported employment is a program designed to help people with severe mental illness find and keep competitive employment. The approach is characterized by focus on competitive work, a rapid job search without prevocational training, and continued support once a job is obtained. Employment specialists work with individuals to identify their career goals and skills. Case managers and mental health providers work closely with employment specialist to provide support during the job seeking and keeping process.

### **Psychosocial Interventions for Weight Management**

Weight gain is a significant and frustrating side effect of many medications used to treat the symptoms of schizoaffective disorder. Weight gain can lead to problems such as diabetes and hypertension, making it a serious health issue for many individuals. Resources to support weight loss are available. Weight programs generally last 3 months or longer and include education about nutrition and portion control. Participants learn skills to monitor their daily food intake and activity levels, have regular weigh-ins, and set realistic and attainable personal wellness goals. Participation in such a program can help prevent additional weight gain and lead to modest weight loss. The VA's version of this program is called MOVE! It is offered in a supportive group setting.

### **Cognitive Remediation**

The goal of cognitive remediation is to reduce cognitive deficits, such as attention, memory, planning, and problem solving. Most cognitive remediation programs are computerized and involve repetition of learning exercises targeted to improve these areas of cognition. To help keep people engaged and motivated, these programs often have games and rewards included during the practice sessions. Some of these programs are available for purchase. In addition to computerized programs, there are also in-person, group-based cognitive remediation programs. These groups discuss ways to improve cognitive functioning and use cognitive-training exercises. Other programs use a combination of the computerized and in-person approaches; research has found that this combination is more effective than either approach on its own. There are some data to suggest that cognitive remediation programs also improve work functioning, relationship quality,



and people's ability to solve interpersonal problems. There are typically greater improvements in these areas when cognitive remediation is combined with other types of psychiatric rehabilitation programs, such as social skills training.

### **Electroconvulsive Therapy (ECT)**

Electroconvulsive therapy (ECT) is a procedure used to treat severe or life-threatening depression. It is used when other treatments such as psychotherapy and medications have not worked. Electrical currents are briefly sent to the brain through electrodes placed on the head. The electrical current can last up to eight seconds, producing a short seizure.

It is believed this brain stimulation helps relieve symptoms of depression by altering brain chemicals, including neurotransmitters like serotonin and natural pain relievers called endorphins. ECT treatments are usually done two to three times a week for two to three weeks. Maintenance treatments may be done one time each week, tapering down to one time each month. They may continue for several months to a year, to reduce the risk of relapse. ECT is usually given in combination with medication, psychotherapy, family therapy, and behavioral therapy.

*There are a variety of medications and therapies available that can help individuals with schizoaffective disorder manage their symptoms and improve their functioning.*

## medication: what you should know

- Because schizoaffective disorder involves many kinds of symptoms, the treatment can be complex. You and your doctor have a lot of choices of medications, and it is hard to know which one may work best for you. It is also often the case that more than one medication is required to treat mood symptoms and symptoms affecting your thinking processes. Sometimes the medication you first try may not lead to improvements in symptoms. This is because each person's brain chemistry is unique; what works well for one person may not do as well for another. Be open to trying a different medication or combination of medications in order to find a good fit. Let your doctor know if your symptoms have not improved or have worsened, and do not give up searching for the right medication!

- There are different types of medications that are effective for schizoaffective disorder. These include antipsychotic medications, mood stabilizers, and antidepressant medications.

- Once you have responded to treatment, it is important to continue treatment. To prevent symptoms from coming back or worsening, do not abruptly stop taking your medications, even if you are feeling better. Stopping your medication can cause a relapse. Medication should only be stopped under your doctor's supervision. If you want to stop taking your medication, talk to your doctor about how to correctly stop them.

- Like all medications, medications prescribed for schizoaffective disorder can have side effects. Your doctor will discuss some common side effects with you. In many cases, they are mild and tend to diminish with time. Some people have few or no side effects, and the side effects people typically experience are tolerable and subside in a few days. Sometimes, common side effects can persist or become bothersome. If you experience such side effects, discuss them with your doctor and be sure to talk to them before making any decisions about discontinuing treatment.

- In rare cases, these medications can cause severe side effects. Contact your doctor immediately if you experience one or more severe symptoms.



**This handout provides only general information about medication for schizoaffective disorder. It does not cover all possible uses, actions, precautions, side effects, or interactions of the medicines mentioned. This information does not constitute medical advice or treatment and is not intended as medical advice for individual problems or for making an evaluation as to the risks and benefits of taking a particular medication. The treating physician, relying on experience and knowledge of the patient, must determine dosages and the best treatment for the patient.**

## antipsychotic medications: what you should know

- Research has found that antipsychotic medications are effective for treating the positive symptoms in schizoaffective disorder and other psychotic disorders. It is not known exactly how they work, but one common feature is the ability to block the action of a chemical messenger in the brain called dopamine. Research suggests that malfunction of this chemical messenger system, as well as others, cause symptoms such as hallucinations and delusions.

- All antipsychotic medications must be taken as prescribed. Their effects can sometimes be noticed within the same day of the first dose. However, the full benefit of the medication may not be realized until after a few weeks of treatment. It is important that you don't stop taking your medication because you think it's not working. Give it time!

- Most antipsychotics are prescribed once daily. If you forget to take your medication, do not double up the next day to "catch up" on the dose you missed. If your medication is prescribed to be taken twice a day, and you forget to take a dose, a rule of thumb is: if it has been *6 hours or less* from the time you were supposed to take your medication, go ahead and take your medication. If it has been *more than 6 hours* after the missed dose should have been taken, just skip the forgotten dose and resume taking your medication at the next regularly scheduled time. *Never double up on doses of your antipsychotic*

*medication to "catch up" on those you have forgotten.*

- Some antipsychotic medications are available as long-acting injectables. Use of injectable medications is one strategy that can be used for individuals who regularly forget to take their medication.





These are sometimes referred to as conventional, typical, or first-generation antipsychotic medications:

**Chlorpromazine (Thorazine)**  
**Fluphenazine (Prolixin)**  
**Haloperidol (Haldol)**  
**Loxapine (Loxitane or Loxapac)**  
**Perphenazine (Trilafon)**  
**Thiothixene (Navane)**  
**Trifluoperazine (Stelazine)**

These are sometimes referred to as atypical or second-generation antipsychotic medications:

**Aripiprazole (Abilify)**  
**Asenapine (Saphris)**  
**Clozapine (Clozaril)**  
**Iloperidone (Fanapt)**  
**Lurasidone (Latuda)**  
**Olanzapine (Zyprexa)**  
**Paliperidone (Invega)**  
**Quetiapine (Seroquel)**  
**Risperidone (Risperdal)**  
**Ziprasidone (Geodon)**

## **LONG-ACTING INJECTABLE ANTIPSYCHOTIC MEDICATIONS**

Certain antipsychotic medications are available as long-acting injectables. These medications are given every two to four weeks. Some patients find these more convenient because they don't have to take the medications daily. The side effects of these medications are similar to their oral counterparts.

**Fluphenazine (Prolixin Decanoate)**  
**Haloperidol (Haldol Decanoate)**  
**Olanzapine (Zyprexa Relprevv)**  
**Paliperidone (Sustena)**  
**Risperidone (Risperdal Consta)**

## **SIDE EFFECTS OF ANTIPSYCHOTIC MEDICATIONS**

Some individuals experience side effects that mimic symptoms of Parkinson's disease, which are called parkinsonian or extrapyramidal symptoms. These include tremor, shuffling walk, and muscle stiffness. A related side effect is akathisia, which is a feeling of internal restlessness. Additionally, prolonged use of antipsychotics may cause tardive dyskinesia, a condition marked by involuntary muscle movements in the face and body. An uncommon, but serious side effect is called Neuroleptic Malignant Syndrome (NMS). These symptoms include high fever, muscle rigidity, and irregular heart rate or blood pressure. Contact your doctor immediately if any of these symptoms appear.

People taking antipsychotic medications can also experience a variety of other side effects including blank facial expression, blurred vision, breast enlargement or pain, breast milk production, constipation, decreased sexual performance in men, diarrhea, difficulty urinating, dizziness or fainting when you sit up or stand up, drowsiness, dry mouth, excessive saliva, missed menstrual periods, mood changes, nausea, nervousness, restlessness, sensitivity to the sun, and unusual dreams.



Weight gain, changes in blood sugar regulation, and changes in blood levels of lipids (cholesterol and triglycerides) are common with some antipsychotics. Therefore, your doctor will check your weight and blood chemistry on a regular basis. If you have a scale at home, it would be helpful to regularly check your own weight. Each of these medications differs in their risk of causing these side effects. If you start to gain weight, talk to your doctor. It may be recommended that you switch medications or begin a diet and exercise program.

Clozapine can cause agranulocytosis, which is a loss of the white blood cells that help a person fight off infection. Therefore, people who take clozapine must get their white blood cell counts checked frequently. This very serious condition is reversible if clozapine is discontinued. Despite this serious side effect, clozapine remains the most effective antipsychotic available and can be used safely if monitoring occurs at the appropriate time intervals.

# mood stabilizers: what you should know

- Mood stabilizers, which are frequently prescribed for bipolar disorder, are also prescribed to treat the mood symptoms of schizoaffective disorder. Except for lithium, many of these medications are anticonvulsants. Anticonvulsant medications were originally developed to treat seizures, but they have been found to be very effective for treating mood disorders.

- Research has found that mood stabilizers are effective for treating mood symptoms in schizoaffective disorder. Brain chemicals called neurotransmitters (chemical messengers) are believed to regulate mood. It is thought that lithium may affect the activity of two of these neurotransmitters, serotonin and dopamine. Anticonvulsants are believed to work by increasing the neurotransmitter, GABA, which has a calming effect on the brain. It is also believed that they decrease glutamate, which is an excitatory neurotransmitter.

- All mood stabilizing medications must be taken as prescribed. After achieving the desired, effective dose of a mood stabilizer, it may take an additional 1-2 weeks before you can expect to see improvement in manic symptoms. It may take up to 4 weeks for depressive symptoms to lessen. It is important that you don't stop taking your medication because you think it's not working. Give it time!

- Once you have responded to medication treatment, it is important to continue taking your medication as prescribed. In general, it is necessary for individuals with schizoaffective disorder to continue taking mood stabilizing medications for extended periods of time (at least 2 years). Discontinuing treatment earlier may lead to a relapse of symptoms. If you have had a number of episodes of mania or depression, your doctor may recommend longer-term treatment. If episodes of mania or depression occur while on mood stabilizers, your doctor may add other medications to be taken for shorter periods of time. To prevent symptoms from returning or worsening, do not abruptly stop taking your medications, even if you are feeling better, as this may result in a relapse. You should only stop taking your medication under your doctor's supervision. If you want to stop taking your medication, talk to your doctor about how to correctly stop.

- Here is a safe rule of thumb if you miss a dose of your mood stabilizing medication: if it has been *3 hours or less* from the time you were supposed to take your medication, take your medication. If it has been *more than 3 hours* after the dose should have been taken, just skip the forgotten dose and resume taking your medication at the next regularly scheduled time. *Never double up on doses of your mood stabilizer to "catch up" on those you have forgotten.*

- Mood stabilizing medications can interact with other medications to create potentially serious health consequences. Be sure to tell your doctor about all the medications you are taking, including prescription medications, over-the-counter medications, herbal supplements, vitamins, and minerals.

## MOOD STABILIZING MEDICATIONS

Lithium (Eskalith or Lithobid)

Valproate/Valproic Acid/Divalproex Sodium (Depakote or Depakene)

Carbamazepine (Equetro or Tegretol)

Lamotrigine (Lamictal)

Oxcarbazepine (Trileptal)

Gabapentin (Fanatrex, Gabarone, Horizant, or Neurontin)

Topiramate (Topamax or Topiragen)

## SIDE EFFECTS OF LITHIUM

Common side effects of lithium: acne, fine hand tremor, increased thirst, nausea, low thyroid hormone (associated with brittle hair, low energy, and sensitivity to cold temperatures), rash, weight gain.

Lithium toxicity is a serious condition caused by having too much lithium in your system. For this reason, your doctor will require you to do periodic blood tests to ensure that lithium is not impacting your kidney or thyroid functioning. In addition, use of certain pain medications (such as ibuprofen) or physical activity with significant sweating can cause your lithium level to increase. You should talk to your doctor about how to exercise safely. Some signs of lithium toxicity include new onset of nausea, vomiting, diarrhea, headache, loss of coordination, slurred speech, nystagmus (abnormal eye movements), dizziness, seizure, confusion, increased thirst, and worsening tremors. You should contact your doctor right away if you experience any of these symptoms.

## SIDE EFFECTS OF ANTICONVULSANTS

Common side effects of anticonvulsants: appetite change, dizziness, double vision, headache, irritability, loss of balance/coordination, nausea, sedation, vomiting, weight gain or loss.

Lamotrigine and carbamazepine may affect white blood cells, the liver, and other organs. Individuals prescribed these medications will need to have their blood checked periodically to make sure the medications are not impacting their organs in a negative way. Lamotrigine and carbamazepine can also cause a serious skin rash that should be reported to your doctor immediately. In some cases, this rash can cause permanent disability or be life threatening. The risk for getting this rash can be minimized by very slowly increasing your dose of lamotrigine. This rash occurs to a lesser extent with carbamazepine although the risk is higher for individuals of Asian ancestry, including South Asian Indians.

Anticonvulsant medications may increase suicidal thinking and behaviors. Close monitoring for new or worsening symptoms of depression, suicidal thoughts or behavior, or any unusual changes in mood or behavior is advised.



# antidepressant medications: what you should know

- Antidepressant medications are sometimes used to treat symptoms of depression in schizoaffective disorder. Individuals who are prescribed antidepressants are usually required to take an antipsychotic at the same time for psychotic symptoms.
- Research has found that antidepressants are effective for treating depression, but it is not clear exactly how they work. Brain chemicals called neurotransmitters (chemical messengers) are believed to regulate mood. Antidepressant medications work to increase the following neuro-transmitters: serotonin, norepinephrine, and/or dopamine.
- All antidepressants must be taken as prescribed for 3 to 4 weeks before you can expect to see positive changes in your symptoms. It is important that you don't stop taking your medication because you think it's not working. Give it time!
- Here is a safe rule of thumb if you miss a dose of your antidepressant medication: if it has been *3 hours or less* from the time you were supposed to take your medication, take your medication. if it has been *more than 3 hours* after the dose should have been taken, just skip the forgotten dose and resume taking your medication at the next regularly scheduled time. *Never double up on doses of your antidepressant to "catch up" on those you have forgotten.*
- There are five different classes of antidepressant medications. Like all medications, the antidepressants can have side effects. The common side effects differ for each class of antidepressants, so they are not covered here. However, if you have any questions, please talk to your doctor or refer to the patient information leaflet that comes with your medication.

## ANTIDEPRESSANT CLASS #1: SEROTONIN REUPTAKE INHIBITORS

This group includes the selective serotonin reuptake inhibitors (SSRIs) which are the most commonly prescribed antidepressants because they have relatively few side effects. SSRIs increase the level of serotonin by inhibiting reuptake of the neurotransmitter. Serotonin modulators are new drugs that act like SSRIs but also affect other serotonin receptors. Their side effects overlap with those of SSRIs.

### SSRIs

Citalopram (Celexa)  
Escitalopram (Lexapro)  
Fluoxetine (Prozac)  
Paroxetine (Paxil)  
Sertraline (Zoloft)

### Serotonin Modulators

Vilazodone (Viibryd)  
Vortioxetine (Brintellix)

## ANTIDEPRESSANT CLASS #2: SEROTONIN AND NOREPINEPHRINE REUPTAKE INHIBITORS (SNRI)

SNRIs are similar to SSRIs in that they increase levels of serotonin in the brain. They also increase norepinephrine in the brain to improve mood.

Venlafaxine (Effexor)  
Duloxetine (Cymbalta)  
Desvenlafaxine (Pristiq)

## ANTIDEPRESSANT CLASS #3: ATYPICAL ANTIDEPRESSANTS

In addition to targeting serotonin and/or norepinephrine, atypical antidepressants may also target dopamine. They also tend to have fewer side effects than the older classes of medication listed below



(antidepressant Classes 4 and 5). The common side effects differ for each of the medications in this class of antidepressants.

Bupropion (Wellbutrin)  
Mirtazapine (Remeron)  
Trazodone (Desyrel)  
Nefazodone (Serzone)

## ANTIDEPRESSANT CLASS #4: TRICYCLICS AND TETRACYCLICS (TCA AND TECA)

This is an older class of antidepressants that also work by increasing levels of serotonin and norepinephrine in the brain. These medications are good alternatives if the newer medications are ineffective.

Amitriptyline (Elavil or Endep)  
Amoxapine (Asendin)  
Clomipramine (Anafranil)  
Desipramine (Norpramin or Pertofrane)  
Doxepin (Sinequan or Adapin)  
Imipramine (Tofranil)  
Nortriptyline (Pamelor)  
Protriptyline (Vivactil)  
Trimipramine (Surmontil)  
Maprotiline (Ludiomil)

## ANTIDEPRESSANT CLASS #5: MONOAMINE OXIDASE INHIBITORS (MAOI)

MAOIs are an older class of antidepressants that are not frequently used because of the need to follow a special diet to avoid potential side effects. However, these medications can be very effective. These drugs work by blocking an enzyme called monoamine oxidase, which breaks down the brain chemicals serotonin, norepinephrine, and dopamine.

When taking MAOIs, it is important to follow a low "tyramine" diet, which avoids foods such as cheeses, pickles, and alcohol, and to avoid some over-the-counter cold medications. Most people can adopt to a low tyramine diet without much difficulty. Your doctor will provide a complete list of all food, drinks, and medications to avoid.

Phenelzine (Nardil)  
Tranylcypromine (Parnate)  
Selegiline (Emsam) patch





**MENTAL ILLNESS RESEARCH, EDUCATION AND CLINICAL CENTER**

VA Desert Pacific Healthcare Network  
Long Beach VA Healthcare System  
Education and Dissemination Unit 06/116A  
5901 E. 7th Street  
Long Beach, CA 90822

**VISIT US ON THE INTERNET AT:**

<http://www.mirecc.va.gov/visn22>

**DOWNLOAD THIS HANDOUT AT:**

[http://www.mirecc.va.gov/visn22/mirecc\\_schizoaffective\\_education.pdf](http://www.mirecc.va.gov/visn22/mirecc_schizoaffective_education.pdf)

Noosha Niv, PhD <sup>1,2</sup>  
Bonnie Zucker, PhD <sup>1</sup>  
Nikki Frousakis, PhD <sup>1</sup>  
Kim Mueser, PhD <sup>3</sup>  
Christopher Reist, MD, MBA <sup>1,4</sup>

<sup>1</sup>VA Desert Pacific Mental Illness Research, Education and Clinical Center (MIRECC)

<sup>2</sup>UCLA Department of Psychiatry and Biobehavioral Sciences

<sup>3</sup>Boston University Center for Psychiatric Rehabilitation

<sup>4</sup>UCI Department of Psychiatry and Human Behavior