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The Complete Family Guide to Schizophrenia: Helping Your Loved One Get the Most Out of Life, Kim T. Mueser and Susan Gingerich

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PART |

An Overview of Schizophrenia

CHAPTER 1

Schizophrenia: The Basics

Schizophrenia is a major psychiatric illness that can have a profound impact on the lives of individuals, their family members, and friends. As family members, you are in a unique position to help your relatives with schizophrenia. You care deeply for your relatives and know them better than any professional. You probably have more contact with them and are in better touch with their moods, feelings, and needs than anyone else. Being aware of changes, for better or worse, before others are places you on the "front line" of treatment, often at a high cost to yourselves. The behavior of people with schizophrenia can be unpredictable, even frightening, at times. It may be difficult to find friends who understand the stress and emotions you're experiencing.

By learning more about schizophrenia and how to cope with common problems, you can reduce the strain of the illness on your family. In this chapter we review facts about schizophrenia that will help you understand your relative's illness and develop realistic goals for the future. Our discussion here is an introduction to schizophrenia and not a comprehensive review of everything known about the illness. For those interested in learning more about the nature and course of schizophrenia, we suggest additional readings at the end of the chapter.

What Is Schizophrenia?

Schizophrenia is a complex and confusing illness for people with the illness, family members, and mental health professionals alike. One reason for much of the misunderstanding about the illness is that the terms *schizophrenia* and *schizophrenia* have many different uses in everyday language, the popular media, and the medical community.

In everyday language, the word *schizophrenic* is often used to mean "contradictory." For example, a person who says one thing and then does another might

be described conversationally as "schizophrenic." In the news, a nation with a friendly foreign policy toward one country and an unfriendly foreign policy toward another, similar country might be described as having a "schizophrenic" foreign policy.

When it *is* used to refer to illness, the word *schizophrenic* is often used too broadly by the popular media to mean psychosis (including symptoms such as hallucinations or delusions) in general or even any severe psychiatric illness. Mental health professionals know that schizophrenia is a specific medical illness that varies in severity. Not all people with psychotic symptoms have schizophrenia, and people with schizophrenia are not always psychotic. Similarly, not all people with schizophrenia are severely ill, nor do all people with severe mental illness have schizophrenia.

Used correctly, *schizophrenia* refers to a specific illness characterized by problems in social functioning, self-care skills, and difficulty distinguishing what's real from what's not real. There is strong evidence that schizophrenia has biological origins; that it is caused by an imbalance in chemicals in the brain. Medication plays an important role in treating the illness by correcting this imbalance. However, there is also evidence that environmental stress contributes to the severity of the illness, with high levels of stress resulting in more frequent symptoms.

The interplay between biology and the environment provides unique opportunities to help relatives by reducing stress and actively supporting the positive steps they may take toward better functioning.

Common Myths about Schizophrenia

Almost everyone in Western society has heard of schizophrenia, but inaccurate depictions of the illness and misuse of the term have perpetuated a number of misconceptions about it. To understand schizophrenia thoroughly, you have to dispense with these myths.

- Myth 1: People with schizophrenia have a "split personality." A split personality is a rare psychiatric illness (called multiple personality disorder or dissociative identity disorder) in which two or more personalities exist within the same person. Many people became acquainted with the disorder through the movie The Three Faces of Eve and the book Sybil (by Flora Rheta Schreiber) and the movie based on it. People with schizophrenia do not have a split personality. Sometimes the behavior of people with schizophrenia varies or is erratic due to fluctuations in symptoms such as paranoia, depression, or anxiety. However, this does not mean that the person has more than one personality.
- Myth 2: People with schizophrenia are highly prone to violence. Despite highprofile coverage of violent crimes committed by those with psychiatric disorders,

violence in people with schizophrenia is more often the exception than the rule. Rather than becoming more violent when their symptoms worsen, most people with schizophrenia withdraw, preferring to spend time alone.

- *Myth 3: Families cause schizophrenia*. Mental health professionals once commonly believed that families caused schizophrenia. Although a few professionals still hold on to this outdated belief, most now understand that schizophrenia is a biological illness that is *not* caused by families. Rather, families can play a vital role in helping their loved ones develop and pursue personal visions of recovery.
- Myth 4: Drugs and alcohol can cause schizophrenia. Drugs such as marijuana, LSD, heroin, cocaine ("crack"), PCP ("angel dust"), ecstasy, and amphetamines ("speed") can cause symptoms that closely resemble schizophrenia. For example, drugs such as LSD and PCP can cause hallucinations, marijuana can lead to anxiety attacks and feelings of panic and unreality, and cocaine and amphetamines can cause frightening delusions. Similarly, alcohol abuse and withdrawal can result in many of these symptoms. Most people who experience schizophrenialike symptoms while using drugs or alcohol stop having these symptoms soon after their substance abuse ceases. However, recent research has found that use of cannabis (such as smoking marijuana) during adolescence and early adulthood is related to an increased chance of developing schizophrenia. Scientists are debating whether using cannabis may trigger the onset of schizophrenia in vulnerable individuals or whether people who are more prone to developing the illness or are in the early stages of it are more likely to use cannabis. Regardless of the role of cannabis, the vast majority of people who abuse drugs and alcohol never develop schizophrenia.

An Overview of Schizophrenia

History of the Concept

The modern concept of schizophrenia as a psychiatric illness has developed mainly over the past 100 years. Although many different individuals have contributed to our current understanding, the work of two pioneers stands out above all others: Emil Kraepelin (1855–1926) and Eugen Bleuler (1857–1939). Kraepelin is credited with first describing the symptoms of schizophrenia as due to a single illness. Kraepelin called schizophrenia dementia praecox, a Latin term referring to the early onset of the illness (praecox) and deterioration in intellectual functioning (dementia). He identified the characteristic symptoms of schizophrenia as hallucinations, delusions, impaired attention span, and social withdrawal.

Bleuler focused more on the nature of symptoms of schizophrenia and less on its course than did Kraepelin. Bleuler believed that the illness did not necessarily have an early age of onset or result in a gradual deterioration in mental functioning. He rejected the term *dementia praecox* and proposed the word *schizo-*

phrenia to describe what he saw as the essential feature of the illness: a split (*schizo*) in the mind (*phren*) between perception and reality—rather than a split between different personalities. However, he agreed with Kraepelin's description of many of the basic symptoms of the illness.

Diagnosis

There is no laboratory test, such as a blood test, X-ray, CT scan, or MRI, that can be used to diagnose schizophrenia. A diagnosis must be based on a careful interview conducted by a trained professional. In addition, a physical exam must be performed to rule out physical problems that could cause similar symptoms. For example, if the person has a brain tumor, an untreated endocrinological disorder (such as hyperthyroidism), or is currently abusing substances, a diagnosis of schizophrenia cannot be made until the physical condition has been treated or controlled.

To ensure that different hospitals and clinics use the same criteria to diagnose schizophrenia, specific diagnostic guidelines have been established (discussed further in Chapter 2). What is important to understand here is that the purpose of the interview is to determine whether the person has experienced any of the symptoms listed in the guidelines. Common symptoms of schizophrenia include hallucinations, delusions, and reduced emotional expressiveness. Other common problems include impairments in thinking and problems in functioning. Every person has a unique set of symptoms. To be diagnosed with schizophrenia, a person need not have every symptom or have them all the time. But all people with schizophrenia experience some problems in social functioning and ability to work, attend school, parent, or take care of themselves.

The symptoms and course of schizophrenia overlap considerably with those of several closely related disorders: schizoaffective disorder, schizophreniform disorder, and schizotypal personality disorder. Because of their similarities and the fact that the same treatments are effective for all, these illnesses are referred to as *schizophrenia-spectrum* disorders. Chapter 2 goes into more detail on the differences; for the sake of simplicity we use the term *schizophrenia* throughout this book. If your relative has any of the disorders in the spectrum, you'll find the information and suggestions in this book helpful.

What Is the Experience of Schizophrenia Like?

Having a better sense of the experience of the illness can help you offer appropriate guidance and support over the years. Schizophrenia has been described as "dreaming when you're wide awake." When we dream, we usually believe that the bizarre things we're experiencing are really happening. Your relative may feel that way when awake, having difficulty distinguishing between reality and the internal illusions taking place.

Practically every person with schizophrenia also has problems with attention. One person told us, "It's hard for me to concentrate on anything because I'm so easily distracted—like right now I'm listening to the cars on the highway outside the hospital." This difficulty can interfere with your relative's ability to work, attend school, parent, or participate in other activities that require sustained attention, such as reading a book. One reason people with schizophrenia have such trouble focusing their attention is that they are often exquisitely sensitive to, and easily overwhelmed by, sounds, sights, odors, and other stimuli. Imagine, as one person described it, playing tennis with many balls coming over the net at the same time.

Problems with motivation and enjoyment are also common. Another person with schizophrenia said, "We used to be a beach family, and I loved going to the beach. Now the beach is just a few blocks away, but I can't get the motivation to go there. Or if I do go, it's not fun." This problem can result in your relative's having fewer leisure activities and getting less enjoyment from social relationships than before the onset of schizophrenia.

Even with this understanding, the experience of schizophrenia is difficult to comprehend fully. If your relative is willing to talk about it, you may be able to understand more by discussing the experience. Many people with schizophrenia lack insight into their illness, however, and are unable to talk about a problem they don't believe exists. Reading books and watching videos of first-person accounts of schizophrenia can be illuminating (see the Resources section at the end of Chapter 2).

Prevalence

Approximately 1 in a 100 people (1%) develops schizophrenia at some point during the lifetime. In the United States, 2–3 million persons have the illness. Schizophrenia occurs in men and women of all races, social classes, religions, and cultures. Some research has indicated that schizophrenia is more common in some cultures than others, but most researchers have found the rate fairly similar across cultures. Schizophrenia is, however, more likely to develop in those living in poverty, among ethnic/racial minorities (rates are slightly higher in African Americans, Afro-Caribbeans in Great Britain, and Dutch Antillean and Surinamese immigrants in Holland), and in urban areas. In all these cases, the higher incidence may occur because of interactions between biological factors responsible for the illness and environmental stress.

The cost of treating schizophrenia, to both families and society, is very high. More hospital beds are occupied by persons with schizophrenia than any other psychiatric illness. Most of the people in state psychiatric hospitals have this diagnosis. Approximately one-fifth of all chronic disability (including both physical and mental illnesses) is due to schizophrenia. The majority of people with schizophrenia are unable to live independently and live either with relatives or in

supervised community residences. About 10% of all homeless individuals have schizophrenia.

How Schizophrenia Develops

Schizophrenia usually develops some time during late adolescence or early adulthood, most often between the ages of 16 and 30, with women developing the illness at a slightly later age than men. Schizophrenia rarely develops after the age of 35. Childhood schizophrenia (onset before puberty) is rare and considered a different disorder. This book is intended for families with a relative who developed schizophrenia in adolescence or adulthood.

The onset of schizophrenia usually follows a gradual decline in functioning, including the ability to socialize and enjoy life. The earliest signs of schizophrenia often include depression, lack of pleasure in daily activities, and social withdrawal. Problems in cognition (thinking) are also common, such as not being able to focus when reading, finding math more difficult, forgetting things more easily, and not making logical connections as easily—all problems that can interfere with school, work, and friends. Usually some time after these problems have developed the person begins to experience psychotic symptoms, such as hallucinations and delusions, which often lead to treatment and possibly hospitalization. The development of schizophrenia may take place over months or even years.

At first you may not have recognized these changes, or you may have attributed them to a "stage" that your relative was going through or to normal adolescent behavior. When families *do* recognize that something is wrong and seek professional advice, they may be told that their relative's behavior is normal and they need not worry. Many professionals who don't work with the seriously mentally ill are not trained to recognize the symptoms of schizophrenia. However, even professionals who are trained to detect schizophrenia often find it difficult to diagnose this illness during its earliest stages.

The question of whether people who develop schizophrenia differ from others in childhood or adolescence, before they become ill, has intrigued researchers for decades. The answer is both yes and no. Many people who develop schizophrenia were well adjusted before they became ill. Among those we personally know with schizophrenia are a high school class valedictorian, a virtuoso cellist who soloed with a major city orchestra, and a writer and illustrator who published his work in high school.

However, some individuals who develop schizophrenia *are* less well adjusted before they become ill, and these people's difficulties often date back to childhood. Two patterns of maladjustment have been described. Some people are unusually withdrawn before developing schizophrenia, have few friends growing up, and have few or no intimate relationships with others, such as a steady boyfriend or girlfriend. These social problems that started early in life often persist

at a more severe level after the onset of schizophrenia. The second pattern of maladjustment involves disruptive behavior problems that first appear in child-hood—typically hyperactivity, attention problems, conduct disorder, and impulsivity. These problems interfere with academic and social functioning and may also persist into adulthood.

It's important to know that most children and adolescents who experience these two types of problems never develop schizophrenia—which means we still can't accurately predict who will develop schizophrenia.

The Course of the Illness

Schizophrenia is an episodic illness with symptoms that vary in intensity over time. When episodes of the illness occur, persistent symptoms worsen and symptoms that have been in remission reappear, at times requiring treatment in the hospital. Inpatient treatment is usually relatively brief (a few days) but may extend to several months. Even with substantial impairment, however, many people can be treated successfully in the community.

The course of schizophrenia is different for each person. Some people have a few episodes of the illness and return to normal functioning with treatment and illness management. Some experience more frequent episodes and only partly regain their former level of functioning between episodes. These individuals may require more frequent hospitalizations at first and need to learn much more to manage their illness successfully, pursue personal goals, and achieve a degree of independence. A small proportion of people become extremely ill and require long-term inpatient treatment because they cannot care for themselves or are unsafe in the community.

Despite the serious impact of schizophrenia, there are good reasons to be optimistic about the long-term prospects. People with schizophrenia tend to improve gradually over time, not only from learning how to manage the illness but also due to a natural reduction in symptoms. A significant number of those with schizophrenia become free of symptoms later in life. We return to the issue of improvement and recovery from schizophrenia in Chapter 3.

Many people want to know whether the course and outcome of schizophrenia can be predicted. In general, the answer is no. However, we do know that people who had social problems *before* they became ill tend to have a more severe course of their illness, including more intense symptoms or more frequent relapses. Early recognition and treatment of schizophrenia has also been found to be beneficial; the more rapidly someone is treated after developing the illness, the more quickly and more effectively the symptoms can be controlled. Women also tend to have a less severe course of the illness than men, including better functioning in the community and fewer hospitalizations. What is most critical in improving the course of schizophrenia is learning how to manage the illness and to take steps toward pursuing personal goals. People with better insight into

their illness tend to have a better course. For some, this insight may develop gradually over time as they come to grips with the disorder and how to control it.

John developed schizophrenia at the age of 16. The next 15 years were rocky because he followed his medication regimen inconsistently, resulting in frequent relapses and rehospitalizations. Then, in his mid-30s, with the help of a family educational program, John began to develop a better understanding and awareness of his illness and started to follow his treatment recommendations, including taking his medication regularly. Gradually his symptoms improved, and he became interested in making social connections and getting back to work. Over the next 15 years John married, had two children, and went back to work part-time, despite continuing to experience mild symptoms of schizophrenia. John sees his psychiatrist and nurse every month to have his symptoms monitored, and he has not been in the hospital for treatment of a relapse in 20 years.

The Causes of Schizophrenia

Over the past 100 years scientists have proposed many theories to explain schizophrenia. Most scientists believe the illness has a biological cause involving some type of disturbance in the brain, but they still don't know exactly which biological factors are responsible. The task of researchers is complicated by the fact that no consistent biological differences have been found between people with the illness and others. One possible explanation for this lack of consistent differences is that schizophrenia is not one disease but several different or overlapping diseases. Extensive research continues to be conducted on possible biological causes of schizophrenia.

The Biology of Schizophrenia

Many theories of schizophrenia propose complex interactions between different parts of the brain (referred to as *neural networks*). For example, many recent theories stress the importance of the *prefrontal cortex*, a region of the brain required for planning, abstract thinking, and problem solving, and the *hippocampus*, a brain structure critical to memory.

The most prominent theory of the illness, the *dopamine hypothesis*, is based on the idea that schizophrenia is caused by an imbalance in chemicals in the brain. These chemicals play a vital role in all aspects of functioning, including the ability to think, feel, perceive, and act in a planned, goal-directed fashion.

Billions of nerve cells, called *neurons*, are densely packed and distributed throughout the brain. All neurons contain chemicals, or *neurotransmitters*, which communicate information from one part of the brain to another. The neurotransmitters are stored inside small sacs (*vesicles*) in the neuron. When a neurotransmitter is released from a vesicle, it leaves the neuron itself (the *presynaptic neuron*) and enters a small space (the *synaptic cleft*) before being absorbed by

another neuron (the *postsynaptic neuron*). Some of the neurotransmitter is absorbed by the postsynaptic neuron, some of it is broken down by other chemicals and excreted through bodily fluids (such as sweat and urine), and some of it is reabsorbed into the vesicle (called *reuptake*) of the presynaptic neuron. The entire process of neurotransmitter release and absorption is referred to as *neurotransmission*.

NEUROTRANSMITTERS AND SCHIZOPHRENIA

Scientists have identified over 50 different kinds of neurotransmitters. An imbalance in the neurotransmitter *dopamine* is believed to exist in schizophrenia. Dopamine is an important neurotransmitter that regulates thoughts and feelings, both of which are disturbed in schizophrenia.

Animal studies of the effects of antipsychotic medications (the most effective medications for schizophrenia) on neurotransmitters have consistently found that these medications block dopamine neurotransmission in the brain. This finding has led scientists to hypothesize that people with schizophrenia have an excess of dopamine in certain regions of the brain. Research has not yet directly shown that people with schizophrenia have an imbalance in brain dopamine, because this is a difficult matter to demonstrate, given the technology currently available to scientists. Nevertheless, the dopamine hypothesis of schizophrenia is the most widely accepted biological theory of the illness, and it continues to stimulate much research into the causes of schizophrenia.

Genetic and Environmental Factors

How do some people end up with a chemical imbalance that results in schizophrenia? Research has shown that having a close relative with schizophrenia increases a person's chance of developing the illness. This familial connection indicates that vulnerability to schizophrenia may be caused partially by genetic factors. The same connection has been found for many other diseases, such as hypertension, diabetes, depression, and coronary artery disease.

As mentioned earlier, about 1% of people in the general population develop schizophrenia. If a person has a first-degree relative with schizophrenia, such as a parent or sibling, the chances are higher, about 1 in 10 (10%). If someone has more than one ill family member, the chances may be even higher. The table on page 000 summarizes the chances that a person will develop schizophrenia, based on whether a relative has the illness.

The significant role of genetic factors is reinforced by the fact that a person with an identical twin (a twin with the same genes) with schizophrenia has a greater chance of developing it than a person with a nonidentical twin who is ill. But a specific pattern of inheritance has not yet been identified, nor has a responsible gene (or combination of genes).

Risk of Developing Schizophrenia				
Relative	Chance of developing schizophrenia			
No relative	1 in 100 (1%)			
Ill aunt or uncle	2-3 in 100 (2-3%)			
Ill parent or sibling	5-10 in 100 (5-10%)			
Both parents ill	15-20 in 100 (15-20%)			
Nonidentical (dizygotic) twin	5-10 in 100 (5-10%)			
Identical (monozygotic) twin	50-70 in 100 (50-70%)			

Another interesting question is why many families have only one person with this illness. If your family has few or no other relatives with mental illness, how did your relative develop schizophrenia? One possibility is that there are other individuals in your family who carry the genes that predispose them to schizophrenia, but these critical genes remain "unexpressed" (or only partially expressed)—meaning that the carriers do not develop schizophrenia but can still transmit the genes to another relative, who may very well develop the illness.

Another possibility is that some cases of schizophrenia may occur for reasons other than genetic vulnerability or because of interactions between very subtle genetic factors and the environment. The risk table shows that not every identical twin of a person with schizophrenia develops the illness—only 50-70% do-which suggests that genetic factors alone cannot explain who becomes ill. Some early environmental factors during pregnancy may increase the risk of developing schizophrenia later, such as the mother being exposed to the influenza virus, smoking cigarettes, or having poor nutrition, as well as obstetric complications during delivery, such as forceps delivery or fetal distress. In addition, the older the father at the conception of the child, the greater the risk of the child's later developing schizophrenia. Scientists don't understand how these environmental factors act, whether in concert with genetic factors or alone. Some have suggested that exposure to these types of environmental "insult" may cause small amounts of brain damage. This damage may become apparent only later in the person's development, when certain critical parts of the brain fail to mature in a normal fashion, such as during adolescence and early adulthood, eventually resulting in schizophrenia.

The Stress-Vulnerability Model of Schizophrenia

Everything that researchers and clinicians have learned about the causes of schizophrenia—its initial development and its course over time—indicates that four different factors are at work: biological vulnerability, stress, coping skills,

and social support. Together they add up to what is called the *stress-vulnerability* model.

Biological vulnerability encompasses genetic factors, exposure to early biological risks (e.g., prenatal exposure to the influenza virus), or both, as just discussed. Among individuals with schizophrenia, the greater the biological vulnerability, the more severe the symptoms and course of illness. There is currently no direct measure of biological vulnerability.

Stress, as most of us are well aware, refers to negative aspects of the environment in which we live. Several types of stress can have a negative effect on those with schizophrenia. Significant life events, such as the death of someone close, loss of a job, or change in residence can be stressful and lead to relapses. Living in an environment with a great deal of conflict or criticism can be stressful and cause relapses, as can living in a setting that places heavy demands on the person or lacks meaningful structure.

Coping skills allow an individual to handle stress and reduce its negative effects. Examples of coping skills are social skills and the ability to relax. Effective social skills enable people to establish rewarding relationships and to resolve conflicts. The ability to relax can help people cope with stress in any context, such as increased demands at work.

Social support is the help, acceptance, and caring received from family, friends, and others. High levels of support play a positive role in buffering the negative effects of stress on people with schizophrenia. Social support can effectively manage stress in several ways. First, support may prevent stress from occurring by addressing potential problem situations before they erupt, such as helping a person manage money to avoid rent defaults that might result in eviction. Second, social support can help a person with schizophrenia resolve a conflict with another person. Third, supportive others can prompt the person with schizophrenia to use coping skills in appropriate situations.

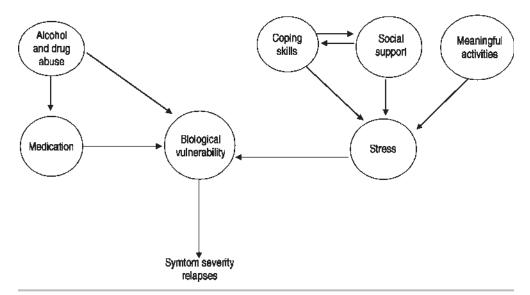
The stress-vulnerability model is illustrated on page 000. In addition to providing a framework for understanding the course of schizophrenia, this model is helpful in guiding treatment.

Treatment

The treatment of schizophrenia is guided by four general principles that follow directly from the stress-vulnerability model.

Reduce Biological Vulnerability

There is no cure for the biological vulnerability that causes schizophrenia. However, antipsychotic medications can reduce symptoms and the risk of relapse. These medications are the most powerful tools in treating schizophrenia, although they are by no means perfect. Adherence to the medication regimen is



The stress–vulnerability model of schizophrenia. This model suggests that the course of schizophrenia can be improved by taking medications, avoiding alcohol and drug use, reducing stress, improving coping skills, and increasing social support.

important, as is monitoring of symptoms so that medication can be adjusted if symptoms change.

Treating substance use will also reduce biological vulnerability and improve the course of the illness. Alcohol use can interfere with the beneficial effects of antipsychotic medications. Drugs such as cocaine, amphetamines, and marijuana can worsen biological vulnerability, leading to more severe symptoms and relapses. Furthermore, biological vulnerability makes people with schizophrenia more sensitive to the effects of alcohol and drugs, so that even small amounts of substances can interfere with functioning and trigger relapses (see Chapter 22).

Reduce Environmental Stress

Stress can be reduced in a number of ways, as discussed in Chapter 11. Stress resulting from tense family relationships can be lowered by developing specific and realistic expectations for your relative's behavior and improving your skills at communicating (Chapter 14) and resolving problems (Chapter 15) with him. Chapter 16 provides additional information on strategies for creating a harmonious living environment. If your relative has little meaningful structure in her life, part-time work or school (Chapter 26) can add structure without creating excessive demands and expectations for rapid change. Striking a balance between

 $^{^{1}}$ For ease of reading, we alternate between masculine and feminine pronouns throughout this book.

understimulation and overstimulation in your relative's environment is vital to minimizing stress at home, work, school, and treatment program.

Improve Coping Skills

Much of this book is focused on the many different types of coping skills people can learn. Broadly speaking, coping skills can be divided into strategies that improve a person's ability to . . .

- 1. Solve problems and achieve goals (e.g., through social skills that resolve interpersonal conflict and improve relationships with others).
- 2. Deal with the negative experience of stress (e.g., through stress reduction techniques).
- 3. Cope more effectively with persistent symptoms and mood problems (e.g., hallucinations, delusions, anxiety, and depression).

Strengthen Social Support

Improving social support goes hand in hand with reducing stress and improving coping skills, and much of this book is aimed at helping families accomplish this increased support. Becoming knowledgeable about schizophrenia, developing realistic expectations, and supporting your loved one in following treatment recommendations and pursuing personal goals can maximize social support. People with schizophrenia often change gradually, and the road toward better living and recovery may be a rocky one, with setbacks along the way. Recognizing the small steps that your relative takes toward greater coping and self-sufficiency, and frequently encouraging him along the way, lets him know you appreciate his efforts and can see progress. Finally, letting your relative know you love her and conveying a sense of hope for the future are powerful influences that will help your loved one maintain the courage necessary to grow beyond the illness and pursue a fulfilling life.

Hope for Those with Schizophrenia

You and your family may be just starting to learn how to manage schizophrenia, or you may have years of experience under your belt. Either way, you now know that schizophrenia is no one's fault and that you can do a lot to help your relative achieve a meaningful and rewarding life. Understanding schizophrenia prepares you to work collaboratively with your relative and her treatment providers.

Although schizophrenia is a serious illness, tremendous advances have been made in its treatment in recent years. New medications, rehabilitation programs, and coping strategies can now help people with schizophrenia manage their symptoms more effectively, enjoy relationships with others, become involved in meaningful activities such as work or school, and live as independently as possible. The prospect of learning how to cope with schizophrenia may seem frightening or overwhelming to you. However, with love and hope, up-to-date information, and realistic optimism based on scientific progress, you *can* help your relative move forward and develop a rewarding life.

Resources

- Andreasen, N. C. (2001). Brave new brain: Conquering mental illness in the era of the genome. New York: Oxford University Press. A leading neuroscientist explains the current state of knowledge about the human brain, human genome, and mental illness in accessible terms, covering schizophrenia and three other major disorders.
- Green, M. F. (2001). *Schizophrenia revealed*. New York: Norton. A highly readable, authoritative account of schizophrenia by a neuropsychologist and researcher.
- Torrey, E. F. (2001). Surviving schizophrenia: A manual for families, consumers and providers (4th ed.). New York: HarperTrade. Detailed information from a leading researcher who has a sister with schizophrenia.