

Excerpt (Chapter 1) from  
*The Natural Medicine Guide to Schizophrenia*  
by Stephanie Marohn

# 1 What Is Schizophrenia, and Who Suffers from It?

Schizophrenia has long been a source of fascination, misunderstanding, mystery, and misery. Historically, it has been the most devastating of mental disorders in the degree of disability that it inflicts on those who suffer from it. It is to be hoped that this book will aid in both dispelling some of the misunderstandings and mystery around schizophrenia and changing the dismal prognosis that has heretofore been the lot of many who are diagnosed with the disease, despite the much-heralded antipsychotic drugs.

The National Institute of Mental Health describes schizophrenia as a “chronic, severe, and disabling brain disease,” the seriousness of which is reflected in the epithet accorded schizophrenia in the psychiatric field: “the cancer of the mind.”<sup>8</sup> Actually, schizophrenia is not a distinct disease, but a group of symptoms that show wide variation, characterized in general by disordered thinking, feelings, and behavior. A standard medical dictionary states that “there may be a precise disease called schizophrenia, but at this time, it is virtually impossible to distinguish it from a disease that may only resemble schizophrenia.”<sup>9</sup>

No wonder misunderstanding reigns. The confusion is compounded by the widely held misconception that schizophrenia is a split personality, as in Robert Louis Stevenson’s *Dr. Jekyll and Mr. Hyde* dichotomy, or even a multiple personality, as in the film *The Three Faces of Eve*. This belief is perpetuated by the ubiquitous misuse of the word “schizophrenic,” which has permeated our popular culture and is used to refer to a divide between opposites, à la Jekyll and Hyde, as in “schizophrenic management.”

The misunderstanding stems in part from the roots of the word “schizophrenia,” which was coined in 1908 by Swiss psychiatrist Eugen Bleuler and means “splitting of the mind.”<sup>10</sup> Dr. Bleuler was referring to the disruption in thinking and feeling that accompanies the disorder, but the original meaning has gotten lost in common usage.

So, confusion reigns in both public and psychiatric spheres as to what exactly schizophrenia is. A summation of the confusion surrounding schizophrenia in medical circles notes that “schizophrenia has resisted definition to an even greater extent than it has resisted treatment.”<sup>11</sup> In the absence of a distinct disease and laboratory findings such as brain abnormalities or other measurable physical anomalies, a diagnosis of schizophrenia depends upon symptomology.

## **Statistics on Schizophrenia**<sup>12</sup>

- 1% of the world population (1 to 2 out of 100 people in the U.S.) develops schizophrenia.
- More hospital beds in the U.S. are occupied by schizophrenic patients than patients with any other illness, including cancer, heart disease, and stroke combined.
- Schizophrenia affects women and men nearly equally, with slightly more men being afflicted, but the onset tends to be earlier and the prognosis less positive among men.
- Schizophrenic onset generally occurs between the late teens and mid-thirties; the median age for men is the early to mid-twenties, while for women it is the late twenties.

- Children of two parents with schizophrenia have almost a 40-percent chance of becoming schizophrenic.
- 10% of schizophrenics commit suicide; up to 40% attempt suicide at least once.
- Schizophrenia in the U.S. costs \$1 to 2 million per individual over a lifetime.
- The annual cost of schizophrenia is \$48 billion (medical treatment, Social Security payments, and wages lost due to illness).
- Fewer than 50% of people with schizophrenia receive adequate treatment.

## In Their Own Words

“I recognized nothing, nobody. It was as though reality, attenuated, had slipped away from all these things and these people. Profound dread overwhelmed me, and as though lost, I looked around desperately for help. I heard people talking but I did not grasp the meaning of the words.”<sup>13</sup>

—Renée, a recovered schizophrenic, co-author of *Autobiography of a Schizophrenic Girl*

## The Symptoms of Schizophrenia

The symptoms of schizophrenia are generally divided into the categories of positive and negative symptoms, which is not a value judgment but a reflection of the deviation from normal function. Thus, positive symptoms are an excess or a distortion of normal functions, while negative symptoms are a lessening or a loss of normal functions.

Positive symptoms include delusions, hallucinations, paranoia, disorganized thinking and speaking, and disorganized or catatonic behavior. Negative symptoms include the “A” list: affective flattening (lack of emotional expression), avolition (lack of energy or initiative), alogia (“poverty of speech”), anhedonia (lack of pleasure or interest in previously enjoyable pursuits), and attention deficits (concentration problems).

Loss of contact with reality is a hallmark of schizophrenia and the source of its categorization as a psychotic disorder. A sense of unreality, disconnection from the world, delusions, and hallucinations are all aspects of a distorted perception of reality. As with schizophrenia, the definition of psychosis is based upon symptoms, largely delusions and hallucinations.

Delusions are false beliefs or thoughts, while hallucinations are false sensory perceptions. The most common delusions involve persecution, as in the belief that you are being followed or watched or that people are talking about and ridiculing you. Other delusions focus on thought withdrawal, the belief that someone or something is taking away your thoughts; thought insertion, the belief that someone or something is putting thoughts into your head; or thought broadcasting, the belief that your thoughts are being transmitted to the world outside your head, often via radio or television. Religious delusions are also common, as in believing that one is Jesus or the Virgin Mary, or a less grandiose delusion.

Hallucinations can involve any of the senses. For example, a typical tactile hallucination among schizophrenics is the sensation of someone brushing against them as if in walking by, or nudging them, and there is nobody there. The most common hallucinations, however, are auditory, in which they hear voices, often conversations or someone issuing directives regarding their behavior.

In one instance, a woman with schizophrenia was forbidden by the voice in her head to eat anything but apples and spinach, and she knew from past experience with this voice that failure to observe the order would have dire consequences. The people around her naturally did not understand her dietary restrictions, but she had a very good reason for them.<sup>14</sup>

Her revelation raises an important point regarding logic, a word not often associated with madness. A number of the practitioners featured in this book emphasized that when they took the time to talk to their patients with schizophrenia, they discovered that they had logical reasons for why they behaved as they did. These logical reasons may have been based on delusions and

hallucinations, but the point is that the seemingly bizarre behaviors were not random and had a kind of order of their own.

Another symptom that is often characteristic of schizophrenia, but which is not part of the official psychiatric symptom picture because it is subjective in nature rather than objectively observable, is a lack of awareness of physical boundaries. Not being clear on where one's body ends and people or objects in the outside world begin may be a function of sensory disturbance and an inability to process stimuli. Without this basic awareness, the person cannot have a strong sense of self. (See chapter 6 for another view of this phenomenon.)

Loss of contact with reality is linked to lack of insight, another feature in schizophrenia. The term refers to lack of awareness that one is ill, which makes the person less likely to be compliant with treatment. Research has found that this symptom is associated with a higher incidence of relapse, more involuntary hospitalizations, greater psychosocial impairment, and a poorer prognosis.<sup>15</sup>

Another hallmark of schizophrenia is disordered thinking. Thoughts (and speech, as an expression of thought) jump around, concentration and focus are difficult or nonexistent, mental associations are disrupted, and answers to questions posed to the individual may bear little or no perceivable relationship to the question. At its extreme manifestation, speech becomes what is known as "word salad," a jumble of words that seem incoherent to listeners.

"Grossly disorganized behavior," as it is termed in psychiatry, may include neglect of daily tasks such as making meals and bathing, dressing in an unusual manner (such as winter gear on a hot day), and having agitated outbursts (as in yelling or swearing), seemingly for no reason.

## In Their Own Words

"If I do something, like going for a drink of water, I have to go over each detail. Find cup, walk over, turn tap, fill cup, turn tap off, drink it. I keep building up a picture. I have to change the picture each time. I have to make the old picture move. I can't concentrate. I can't hold things...It's easier if I stay still."<sup>16</sup>

—a person with schizophrenia describing the loss of automatic movement

Of the negative symptoms of schizophrenia, flattened affect is quite often a feature. In this, the person has a blank look to observers and the face appears to be void of emotions or expression most of the time. Body language is similarly absent or reduced, as is eye contact. Another common negative symptom is alogia, in which the person answers or interacts with "brief, laconic, empty replies."<sup>17</sup>

Another way of characterizing the disorder, which summarizes the condition behind the symptoms, is that people with schizophrenia have trouble processing or filtering stimuli. E. Fuller Torrey, M.D., a clinical and research psychiatrist who specializes in schizophrenia, likens it to a switchboard operator failing to do the job of sorting and directing the incoming calls. Without this function, appropriate response becomes next to impossible. The limbic system of the brain acts as a filter (the switchboard) for sensory information; scientists suspect that this is the area most implicated in schizophrenia.<sup>18</sup>

The onset of schizophrenia, with some combination of the symptoms just cited, can be sudden or gradual, but there are usually signs that develop before the psychotic episode. These warning signs are clinically termed "prodromes" of the disease and include withdrawal from people and activities, lack of attention to appearance and cleanliness, and angry outbursts or other atypical behavior.

In addition to the symptoms associated with schizophrenia, there is a comorbidity factor with nicotine dependence, obsessive-compulsive disorder, and panic disorder.<sup>19</sup> *Comorbidity* means that two disorders exist together. Among people with schizophrenia, 80 to 90 percent are habitual cigarette smokers, and as such, nicotine dependent.<sup>20</sup> (See chapter 2 for more discussion of smoking and schizophrenia.)

## Psychiatric Criteria for a Diagnosis of Schizophrenia

For a diagnosis of schizophrenia, according to the bible of the psychiatric profession, the *DSM-IV (Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition)*, at least two of the following symptoms must be present for “a significant portion of time” over a month (or less if treatment halts the symptoms):<sup>21</sup>

1. Delusions
2. Hallucinations
3. Disorganized speech
4. Grossly disorganized or catatonic behavior
5. Negative symptoms such as affective flattening, alogia, or avolition.

The presence of bizarre delusions or auditory hallucinations in which a voice makes continual comments about the individual or two or more people are heard in conversation obviates the requirement for two symptoms.

While these “active-phase” symptoms must last at least a month, there must be signs of disturbance for six months or more. These signs may be negative symptoms or less severe positive symptoms such as unusual perceptions or beliefs.

In addition, diagnosis requires that there is a marked decrease in the person’s social, occupational, and/or self-care functioning since the disturbance began (or in the case of children, their functioning in these areas fails to develop as expected).

Finally, it must be determined that these symptoms are not due to other causes. That is, schizoaffective disorder (see following section), mood disorder, medical conditions, and substance-induced psychosis must be ruled out. This is because medical conditions such as Cushing’s syndrome or a brain tumor can produce schizophrenia-like symptoms, as can street drugs, medications, or toxic exposure (see chapter 2).

### In Their Own Words

“When people are talking, I just get scraps of it. If it is just one person who is speaking, that’s not so bad, but if others join in, then I can’t pick it up at all.”<sup>22</sup>

—a person with schizophrenia describing perceptual disruption

## Types of Schizophrenia

In addition to the main category of schizophrenia, there are a number of subtypes and alternative diagnostic labels, as defined in the *DSM-IV*. A holistic medical approach does not use such diagnoses to determine the appropriate treatment course, focusing instead on the particular manifestations and underlying imbalances in the individual patient. Nevertheless, as many people receive these labels, it’s helpful to know to what they refer.

### Schizophrenia Subtypes

A person may fit into more than one subtype, and two of them are vague categories for use when people don’t fit anywhere else. Even the authors of the *DSM-IV* admit that due to the “limited value of the schizophrenia subtypes in clinical and research settings (e.g., prediction of course, treatment response, correlates of illness), alternative subtyping schemes are being actively investigated.”<sup>23</sup> In other words, the diagnostic subtypes don’t serve much purpose aside from, in the case of three of them, describing the primary symptoms.

### Paranoid Type

Paranoid schizophrenia is characterized by delusions or auditory hallucinations, without significant impairment of thinking and feeling. The delusions involved are usually of the

persecution and/or grandiose type. The hallucinations typically relate to the theme found in the delusions. Anxiety, anger, aloofness, and a tendency to argue are also common. The onset of paranoid schizophrenia is usually later than with other types and the prognosis is better because of mild to nonexistent disturbance in thinking.

### Disorganized Type

As suggested by its name, the main characteristic of this type of schizophrenia is disorganization of speech and behavior. Flattened or inappropriate emotional expression (such as laughter with no apparent connection to speech content) is also present. If the person has hallucinations or delusions, they too tend to be disorganized, rather than relating to a theme as is the case with the paranoid type. The disorganization in behavior can result in major disturbance in daily activities. Early onset and lack of remission also characterize the disorganized type of schizophrenia.<sup>24</sup>

### Catatonic Type

Catatonia is characterized by psychomotor symptoms that range from immobility to excessive movement, from holding a fixed posture to stupor (a total lack of response to and seeming unawareness of one's environment). Grimacing, echolalia (repetition of others' words or phrases), and echopraxia (repetitive mimicking of others' movements) are also common.

### Undifferentiated Type

According to the *DSM-IV*, the undifferentiated type meets the criteria for a diagnosis of schizophrenia, but does not fall into the paranoid, disorganized, or catatonic subtypes.

### Residual Type

This type of schizophrenia may reflect the transition from a psychotic episode to remission, but can be operational for years. To meet the criteria for the residual type, the person must have had at least one schizophrenic episode, but delusions, hallucinations, and other positive symptoms are at this time not significant. Negative symptoms are present, however.

## In Their Own Words

"I thought I was telepathic. I thought everybody in the world had read my mind and that they had a negative impression of me. So when I thought that I had caused people in different provinces [in Canada] to commit suicide because of me blasting them with waves of telepathic neurotic hatred, I thought, 'Well, now they're going to get me.'"<sup>25</sup>

—Ian, who reversed his schizophrenia with orthomolecular medicine

### Other Diagnostic Categories

The diagnostic labels schizophreniform disorder and schizoaffective disorder are used when the criteria for a diagnosis of schizophrenia are not met but the disorder shares a number of features with schizophrenia. The *DSM-IV* also cites other psychotic disorders, but it is sufficient for our purposes to limit discussion to these two.

### Schizophreniform Disorder

For this diagnosis, the person meets the criteria for schizophrenia, except that the illness (prodromal, active, and residual stages) has lasted less than six months and there may or may not be disturbance in the person's social and professional function. If the illness meets all the criteria for schizophrenia except the duration and it then lasts past the six-month mark, the diagnosis will become schizophrenia.

## Schizoaffective Disorder

While this disorder is listed under schizophrenia in the *DSM-IV*, it is defined as involving a major depressive, manic, or mixed episode (both mania and depression) in combination with two or more of the characteristic symptoms of schizophrenia: delusions, hallucinations, disorganized speech, catatonic or grossly disorganized behavior, or negative symptoms such as flat affect, alogia, or avolition. Schizoaffective disorder presents very much like bipolar disorder (the mood disorder formerly known as manic-depression) with psychotic features, the difference being that delusions and hallucinations in the latter case are part of the abnormal mood, while no such relationship exists in schizoaffective disorder.<sup>26</sup>

People with schizophrenia are frequently diagnosed with bipolar disorder and vice versa. Others receive a dual diagnosis of schizophrenia and bipolar disorder. The schizoaffective category highlights the confusion in attempting to distinguish between the disorders.

For information about bipolar disorder, see the author's *The Natural Medicine Guide to Bipolar Disorder* (Hampton Roads, 2003).

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## The Demographics of Schizophrenia

Schizophrenia affects about one percent of the population worldwide, with some evidence suggesting that there are slight variations according to geography and culture. For example, research indicates that more people are afflicted in the northern hemisphere as compared to the southern, and the closer one is to the equator the less likely one is to develop schizophrenia.<sup>27</sup> In addition, Papua, New Guinea, has a very low rate while western Ireland, Sweden, and the Istrian peninsula in Croatia purportedly have very high rates. The incidence is also high among Caribbean immigrants in England (but not high in their native countries, with the exception perhaps of Dominica).<sup>28</sup> In the past 20 years, the incidence of schizophrenia has reportedly decreased in Scotland, England, Denmark, Australia, and New Zealand, while some evidence suggests that it has increased in the United States.<sup>29</sup> As with so much else about schizophrenia, the causes for these changes and variations are a mystery.

The type, course, and outcome of the illness vary across cultures as well, with catatonic schizophrenia more common in developing countries than in industrialized countries. Schizophrenia in the latter tends to be chronic and have a worse outcome while in the former it is usually acute and has a better prognosis.<sup>30</sup> One World Health Organization (WHO) study found that a large percentage of people with severe schizophrenia in less industrialized cultures where extended families are the norm recovered completely, unlike in the industrialized world, where nuclear families are the norm. Further, the WHO study found that the availability of psychiatric drug treatment is correlated with more negative outcomes for people with schizophrenia.<sup>31</sup>

Incidence rates are almost twice as high in urban, as opposed to rural, locations, with the poor in the cities most affected. Some research found a higher rate of schizophrenia among African Americans, but further investigation determined that this is due more to residence in cities than to race. Among rural-dwelling African Americans, the incidence is no higher than normal.<sup>32</sup>

Schizophrenia tends to run in families and usually manifests in late adolescence or early adulthood. Fewer than one percent of people with schizophrenia have an onset before age 12, and fewer than ten percent have an onset after age 45.<sup>33</sup> The peak age of onset is the early to mid-twenties for men and the late twenties for women.<sup>34</sup> As with bipolar disorder, the average age of onset has dropped from what it was 20 years ago. Again, the reason is unknown.

## Violence, Suicide, and Schizophrenia

A common myth about schizophrenia is that people with the disorder are violent. The myth is fueled by the occasional, highly publicized act of violence committed by a diagnosed schizophrenic, typically against a famous person. While there is disagreement over whether people with schizophrenia are more likely than nonschizophrenics to perpetrate violence against others, the official stance of the National Institute of Mental Health (NIMH) is: “Most individuals with schizophrenia are not violent; more typically, they are withdrawn and prefer to be left alone. Most violent crimes are not committed by persons with schizophrenia, and most persons with schizophrenia do not commit violent crimes.”<sup>35</sup> There is evidence that the same factors that increase the likelihood of violence in the general population are those that increase the likelihood among people with schizophrenia. These include drug abuse, being young, male, and poor.<sup>36</sup>

When it comes to violence against self, however, schizophrenics are more likely than the general population to harm themselves, with the ultimate harm being suicide. As many as 40 percent of people with schizophrenia attempt suicide at least once, while ten percent of schizophrenics succeed in killing themselves.<sup>37</sup> Alcohol abuse increases the likelihood of suicide, as alcohol features in 30 percent of all suicides.<sup>38</sup>

The high incidence of suicide attempts among people with schizophrenia makes it important for those with the condition, as well as their family and friends, to be aware of the warning signs of suicide. Being forewarned may enable you to prevent this tragedy from happening if the signs begin to manifest. Among schizophrenics, increased risk factors include being male, under 45 years old, unemployed, depressed or hopeless, and recently discharged from the hospital.<sup>39</sup> In general, the warning signs of suicide are:<sup>40</sup>

- feelings of hopelessness, worthlessness, anguish, or desperation
- withdrawal from people and activities
- preoccupation with death or morbid subjects
- sudden mood improvement or increased activity after a period of depression
- increase in risk-taking behaviors
- buying a gun
- putting affairs in order
- thinking, talking, or writing about a plan for committing suicide

If you think that you or someone you know is in danger of attempting suicide, call your doctor or a suicide hotline or get help from another qualified source. Know that there is help and, though it may be difficult to ask for it, a life may depend on it.

### **Factors Associated with a Better Outcome**

Research has linked the following factors to a more positive prognosis in schizophrenia.<sup>41</sup>

- Good adjustment prior to becoming ill
- Acute onset
- Onset at a later age
- Being a female
- Accompanying mood disturbance
- Treatment soon after onset
- Good functioning between episodes
- Minimal residual symptoms
- No structural brain abnormalities
- Normal functioning of the nervous system
- Awareness of illness
- Family history of mood disorders
- No family history of schizophrenia

## Schizophrenia and Creativity

There is another side to schizophrenia, and that is its possible link to creativity. Madness in general has long been paired with genius in the arts. Investigation reveals that there is some substance behind what some dismiss as a romantic notion.

Psychiatrist E. Fuller Torrey, M.D., cites the cognitive traits that characterize creative people and people with schizophrenia: “Both use words and language in unusual ways (the hallmark of a great poet or novelist), both have unusual views of reality (as great artists do), both often utilize unusual thought processes in their deliberations, and both tend to prefer solitude to the company of others.”<sup>42</sup>

In addition, Dr. Torrey reports that psychological testing of creative people reveals more “psychopathology” as compared to noncreative people. At the same time, nonparanoid schizophrenics test very high on creativity tests. Another study found that the immediate family members of a creative person appear to be more likely to develop schizophrenia, and similarly, the immediate family members of a schizophrenic person test higher for creativity.<sup>43</sup>

The connection between madness and creativity is not fully understood. Does the artistic process promote madness or are people suffering from mental illness temperamentally drawn to the arts? Whatever the answer, it is important not to lose sight of the tragic aspect of the madness-genius equation, which can get lost in the romanticization of the artistic life. As Kay Redfield Jamison, Ph.D., author of *Touched with Fire*, an exploration of the connection between madness and creativity, observes, “No one is creative when paralytically depressed, psychotic, institutionalized, in restraints, or dead because of suicide.”<sup>44</sup>

### Famous People with Schizophrenia

The following are among the well-known people who suffered from schizophrenia.<sup>45</sup>

Antonin Artaud, writer  
Ivor Gurney, poet/composer  
Jakob Adolf Hagg, composer  
Johann Friedrich Hölderlin, poet  
John Forbes Nash Jr., Nobel prize-winning mathematician,  
subject of the film *A Beautiful Mind*  
Vaslav Nijinsky, dancer/choreographer  
Adolf Wolfli, painter  
*Possibly:*  
James Joyce, writer  
August Strindberg, writer  
Vincent van Gogh, painter

## The History of Schizophrenia and Its Treatment

In the history of schizophrenia is also found the muddled confusion that surrounds other aspects of the disorder. While some authorities maintain that schizophrenia has afflicted humans throughout time, others aver that it is a relatively modern disorder that came into existence in the early 1800s.

Proponents of the age-old view cite a description of what they believe to be schizophrenia found in Hindu scriptures dating from around 1400 B.C. Seen as the victim of devils, the person “is gluttonous, is filthy, walks naked, has lost his memory, and moves about in an uneasy manner.”<sup>46</sup> Biblical descriptions of insanity are considered further support for this position.

Those who believe that schizophrenia is a more recent phenomenon acknowledge that psychoses resembling schizophrenia may have existed but that the causes were disease or injury and not the entity we know as schizophrenia. While isolated descriptions of schizophrenia-like conditions appeared in the seventeenth and eighteenth centuries, there was a sudden flood of descriptions in the nineteenth century, beginning with what proponents of this view cite as the



first definite descriptions of schizophrenia. These were published independently in 1809 by both English physician John Haslam and French physician Philippe Pinel.

One school of thought maintains that the flood of descriptions was a reflection of a huge increase in mental illness in Europe during the 1800s. Various arguments, such as the advent of industrialization leading to workers no longer taking care of insane family members in the home, attempt to explain away this phenomenon, but analysis by some authorities has resulted in the conclusion that the increase did indeed occur. A huge increase in madness purportedly occurred in the United States as well, as reflected in a dramatic rise in the number of mental hospitals. Again, the reason for the increase, if such it was, is not known.

Whether schizophrenia existed as a distinct disorder before the 1800s or not, people who were deemed insane were subjected to a range of “medical” treatments over the years. In the view of the ancient world and later in the Middle Ages, the insane were regarded as victims of demon possession and, as such, needed to be treated with compassion. Torture and persecution of the insane commenced with the witch-burnings, beginning in the fifteenth century, and continued through the 1700s.

In the 1800s, the cause of schizophrenia was considered unknown, although environment, heredity, and organic disease were variously proposed as the source of the ailment. Hospital reform during this era led to more humane treatment of the insane. The methods for treating schizophrenia that evolved in the nineteenth and twentieth centuries included immersion in hot or cold baths, inducing fevers, inducing an insulin coma, and electroconvulsive therapy (shock treatment).

The year 1852 brought the introduction of the term *dementia praecox*, the early name for schizophrenia. Benedict Morel dubbed the illness he was witnessing in the French mental institute where he served as the head physician *démence précoce* (early or premature loss of mind), referring to its early onset. The clinical version of this is the Latin *dementia praecox*. As noted earlier, it wasn't until the early 1900s that the term “schizophrenia” came into usage.

In the late 1800s, German physician Emil Kraepelin studied and documented schizophrenia and other mental illnesses, providing the foundation for modern psychiatry. Its focus on diagnosis and classification comes from Dr. Kraepelin.<sup>47</sup>

The belief that psychological factors were the cause of mental illnesses arose from the work of Sigmund Freud and began to gain cachet in the American medical establishment in the 1920s.<sup>48</sup> With the source of such illness firmly placed in the mind, parents (mostly mothers), early trauma, and psychological conflicts became the culprits behind schizophrenia, bipolar disorder, and autism. This orientation is largely responsible for the stigma that came to be attached to mental illness—that is, that schizophrenia is not a disease like any other, but a failing on the part of the individual or the individual's mother.

The so-called schizophrenogenic mother (a woman whose maladjusted mothering caused her child's schizophrenia) or the “frozen mother” (whose withholding of love caused the schizophrenia in her child) are close relatives of the “refrigerator mother” whose lack of emotional engagement was blamed for autism. Before the psychological model gave way to the biochemical model of mental illness, these labels caused further anguish in families already dealing with the painful realities of having a schizophrenic child.

The advent of psychiatric drugs in the 1950s transformed the psychiatric field, shifting the focus of the causality of mental illness to the biochemical realm and turning the profession into a pharmaceutical industry. Gradually, the medical redefinition with its focus on biology permeated public consciousness, but the stigma attached to mental illness persists to a certain degree. This is especially true of schizophrenia, which has not reaped the benefits that other mental disorders have from celebrities going public about their bipolar disorder or clinical depression and helping to dispel some of the earlier judgments and misconceptions. Medically, the role of psychological

factors in schizophrenia is dismissed or considered minimal and the focus of treatment is on drugs.

In the United States, another development in the mental health field had serious consequences that are still reverberating through society and among the mentally ill today. A policy of deinstitutionalization, initiated across the country in the late 1960s, resulted in massive closure of state and county mental hospitals. From 1969 to 1975 alone, the schizophrenic population in such facilities dropped by nearly half.<sup>49</sup> These people were now supposed to receive treatment on an outpatient basis, but services were woefully inadequate. The result has been catastrophic. Nationwide, “90 percent of the people who would have been in the hospital 40 years ago are not in the hospital today,” states Dr. Torrey.<sup>50</sup>

In California, where the 1967 Lanterman Petris Short (LPS) Act led to the closure of many mental hospitals and the abolishment of staff positions in many others, the state mental hospital population dropped from 35,739 in 1968 (the year before LPS took effect) to 4,000 in 1999. “Between 20,000 and 30,000 people with mental illness are in our jails and prisons. At least an equal number are homeless on the street,” reads a report by a task force that investigated the impact of this law in California.<sup>51</sup> This tragic situation exists throughout the United States.

“The new mental hospitals are the streets,” observes Abram Hoffer, M.D., Ph.D., whose work with schizophrenia is covered in chapter 3.<sup>52</sup>

An estimated one-third of those who are homeless suffer from severe mental illness, predominantly schizophrenia.

One could add that jails and prisons are also our new mental hospitals. “It is easier for a person with a severe mental illness to get arrested than to get treatment,” reads a statement in a report by the National Alliance for the Mentally Ill (NAMI). The report cites the lack of community services for the mentally ill as the cause of “the growing criminalization of persons with severe mental illnesses.” According to NAMI statistics, more than 10 percent of jail and prison inmates suffer from schizophrenia, bipolar disorder, or major depression.<sup>53</sup>

The criminalization of the mentally ill carries with it the issue of forced medication. The incarcerated mentally ill have been forcibly medicated, and court cases either challenging the practice or seeking to continue it have arisen.<sup>54</sup> Without federal guidelines on the issue, it continues to be heard on a case-by-case basis. Meanwhile, many inmates are forced against their will to take powerful antipsychotics. This has serious implications for those who wish to follow an alternative route of treatment, such as the therapeutic approaches enumerated in this book.

## In Their Own Words

“Robert’s diagnosis has changed frequently in the past 30 years, depending largely upon which drugs have been successful in keeping him calm, stable, and/or compliant. He was schizophrenic when enormous doses of Thorazine and Stelazine calmed him; he was manic-depressive (bipolar) when lithium worked; he was manic-depressive-with-psychotic-symptoms, or hypomanic, when Tegretol or Depakote (anticonvulsants), or some new antipsychotic or antidepressant...showed promise of making him cooperative...”<sup>55</sup>

—Jay Neugeboren, about his brother Robert’s illness

## The Pharmacological Age

Antipsychotic medications now rule conventional psychiatric treatment of schizophrenia. The current conventional view is that schizophrenia is a brain disorder involving some kind of neurotransmitter malfunction, so drugs thought to manipulate neurotransmitter function are the prescribed course of treatment.

Neurotransmitters are the brain’s chemical messengers that enable communication between cells. While there are many different kinds of neurotransmitters, the primary ones thought to be involved in schizophrenia are dopamine, serotonin, epinephrine/norepinephrine, GABA (gamma-aminobutyric acid), and glutamate.

Much of the research on neurotransmitters and schizophrenia has focused on dopamine, largely because Thorazine, an antipsychotic drug that reduced the symptoms of schizophrenia and was the standard treatment until other antipsychotics were developed, was found to reduce dopamine activity. In fact, this drug-spurred approach has been the basis for much of the neurotransmitter research. Serotonin got attention because clozapine, another antipsychotic drug used with schizophrenia, affected serotonin.

One theory holds that dopamine may be operating to excess in severe mania and acute schizophrenia,<sup>56</sup> but recent research suggests that this is too simplistic given the complexity of the dopamine system.<sup>57</sup> Dopamine has a role in memory retrieval, attention, mood regulation, and the processing of experience, emotion, and thought.<sup>58</sup>

Serotonin influences mood, regulates sleep and pain, and is involved in sensory perception, all of which have relevance to schizophrenia. Contrary to popular belief, serotonin is not found only in the brain. In fact, only five percent of the body's supply is in the brain, with 95 percent distributed throughout the body and involved in many functions.<sup>59</sup> Serotonin is similarly distributed throughout the brain, where it is "the single largest brain system known."<sup>60</sup>

Epinephrine (also known as adrenaline) and norepinephrine are hormones produced by the adrenal gland. Epinephrine is involved in the stress response and the physiology of fear and anxiety; an excess has been implicated in some anxiety disorders. Norepinephrine is similar to epinephrine and is the form of adrenaline found in the brain.<sup>61</sup> It plays a role in cognitive functions such as attention, learning, and mental sharpness. Interference with norepinephrine metabolism at certain brain sites has been linked to affective disorders.<sup>62</sup> Paranoia, aggression, and anger may result from high levels; note that amphetamines, which raise norepinephrine levels, can produce similar effects.<sup>63</sup>

GABA operates to stop excess nerve stimulation, thereby exerting a calming effect on the brain. GABA is involved in 30 to 50 percent of brain synapses (the juncture between two nerve cells on the pathways along which communications in the brain travel).<sup>64</sup> Two important functions of glutamate involve memory and the curbing of chronic stress response and excess secretion of the adrenal "stress" hormone cortisol. Stimulus adaptation, which is impaired in schizophrenia, is thus the purview of glutamate.<sup>65</sup>

Neurotransmitters are ostensibly the targets of psychiatric drugs used in the treatment of mental illness, although it is unknown exactly how these drugs work. In the case of schizophrenia, these drugs fall into the categories of antipsychotics (typical and atypical), mood stabilizers, antidepressants, and tranquilizers. While the effects and side effects of all could be enumerated at length, the following brief discussion focuses on antipsychotics, which are the mainstay of drug prescription for schizophrenia.

Antipsychotics, also known as neuroleptics (the literal translation is "taking hold of the nerves"), and formerly referred to as major tranquilizers, work to control schizophrenia by blunting a range of brain activities. They produce "apathy, indifference, emotional blandness, conformity, and submissiveness, as well as a reduction in all verbalizations, including complaints or protests," according to Peter R. Breggin, M.D., and David Cohen, Ph.D., authors of *Your Drug May Be Your Problem*. "It is no exaggeration to call this effect a chemical lobotomy."<sup>66</sup> The phrase "the Thorazine shuffle" came into usage in mental hospitals in the early days of Thorazine prescription, referring to the characteristic way of moving as a result of the numbing physical, mental, and emotional effects of this primary neuroleptic.

Although antipsychotics are ostensibly given to control delusions and hallucinations, they actually have no specific effects on either, say Drs. Breggin and Cohen, and their side effects are daunting. In addition to those cited, side effects of this class of drugs include dry mouth, blurred vision, drowsiness, restlessness, muscle spasms, and tremors. They can also cause side effects that resemble psychotic symptoms.<sup>67</sup>

A serious long-term effect of neuroleptic drugs is tardive dyskinesia (TD), characterized by involuntary muscle movement, most often afflicting the limbs, mouth, tongue, eyes, and other parts of the face. Involuntary grimaces, tongue protrusions, lip smacking, and chewing are typical manifestations. TD can be a permanent disability, meaning that it persists even when the drug is discontinued. TD indicates that the drug has damaged the brain in some way, but the medical profession tends to downplay the problem.

In a pamphlet written by a team of psychiatrists at the Clarke Institute of Psychiatry in the Department of Psychiatry at the University of Toronto to provide information to patients and their families on medications for schizophrenia, the authors state the following in regard to TD: “[T]he benefits of medication must be weighed against the adverse effects, and most people who have tardive dyskinesia are less disturbed by it than are their relatives and friends. In other words, the effects are unsightly but not necessarily uncomfortable.”<sup>68</sup> Might the presence of this misleading and presumptuous, even outrageous, statement have anything to do with an illuminating note at the end of the pamphlet? “This booklet has been provided by The Professional Services Department of Merrell Dow Pharmaceuticals (Canada) Inc.”<sup>69</sup>

While so-called atypical antipsychotics, such as Zyprexa, are enjoying cachet now over Thorazine and other typical antipsychotics because their side effects are regarded as less onerous, Drs. Breggin and Cohen strongly state: “All neuroleptics produce an enormous variety of potentially severe and disabling neurological impairments at extraordinarily high rates of occurrence; they are among the most toxic agents ever administered to people.”<sup>70</sup>

Bernard Rimland, Ph.D., director of the Autism Research Institute in San Diego, California, coined the term “toximolecular” in reference to the psychiatric practice of treating mental illnesses with “sublethal doses of substances that will kill you.”<sup>71</sup>

Toximolecular medicine is in direct contrast to orthomolecular medicine, which is the use of natural substances to bring about health (see chapter 3).

While the risks associated with neuroleptics are considered by many to be worth it if the drug can control an adult’s schizophrenia, there can be no justification for the growing use of antipsychotics on children for whom the drugs are not approved and for whom the purpose has nothing to do with schizophrenia (see sidebar). It should also be noted that 30 to 60 percent of people with schizophrenia are drug-resistant to neuroleptics, which means the drugs don’t work.<sup>72</sup>

Atypical antipsychotics are supposed to be less likely to produce TD than the older, typical antipsychotics, but there is still a risk. More common side effects of the newer class of drugs include dizziness, drowsiness, drooling, weight gain, fatigue, dry mouth, lowered blood pressure, rapid heart beat, constipation, social withdrawal, and Parkinsonian-like symptoms.<sup>73</sup>

In the case of clozapine, it can cause a condition known as agranulocytosis, a potentially fatal disease in which the manufacture of white blood cells is dangerously curtailed.<sup>74</sup> Clozapine and risperidone can produce neuroleptic malignant syndrome, another potentially fatal disease, this one of the brain, with symptoms similar to those of viral encephalitis.<sup>75</sup> And these drugs are considered less onerous than the typical antipsychotics!

As with typical antipsychotics, science does not know exactly how atypical antipsychotics work. One research team summarized, “The precise pharmacologic mechanisms underlying ‘atypicality’ remain unclear. . . .”<sup>76</sup> Further, although the new drugs are touted as an improvement over the old in effectiveness and reduced side effects, research calls this claim into question. One study analyzed 52 randomized trials, with a total of 12,649 subjects with schizophrenia, and concluded, “There is no clear evidence that atypical antipsychotics are more effective or are better tolerated than conventional antipsychotics.”<sup>77</sup> One feature strongly differentiates the new class of drugs from the old, however: they are far more expensive. So much so that some people’s medical coverage won’t pay for them.

## **More Children Are Getting Antipsychotic Drugs**

A new and disturbing trend in conventional medicine and psychiatry is the increasing use of antipsychotic medications to control children's behavior. About 532,000 children, between the ages of six and 18, are on these drugs. This number comprises only non-hospitalized children, not those who are on the drugs as part of inpatient treatment. The number is more than ten times what it was ten years ago, and back then most children receiving antipsychotics were in a treatment facility of some kind.

Atypical antipsychotics such as Risperdal and Zyprexa are being prescribed to children, not because they have been diagnosed with childhood schizophrenia, but to curb aggressive behavior such as hitting and biting. While the FDA has approved these drugs for use in treating adult schizophrenia, it has not approved their use in children, much less as a treatment for aggression. Doctors, however, can legally prescribe them to children on what is known as an "off-label" basis, which means that the drug is being used outside of approval parameters.

Research on the use of atypical antipsychotics in children is appallingly inadequate: study of the effects of these drugs amounts to looking at approximately 500 children for one year. Neither the short-term nor the long-term effects of these drugs on developing bodies is known.<sup>78</sup>

A growing number of children are also being put on antidepressants, despite the fact that Prozac and similar antidepressants are approved by the FDA only for use in patients over the age of 18.<sup>79</sup> There has been very little research even on adults on the long-term effects of taking antidepressants such as Prozac. It is known, however, that this class of antidepressants can produce neurological disorders, and permanent brain damage is a danger.<sup>80</sup>

Add to this the alarming number of children who have been diagnosed with ADD/ADHD (attention deficit/hyperactivity disorder) and are on drugs such as Ritalin, and it could be said that the youth of today are entering adulthood heavily medicated. The implications of this have yet to be revealed.

When side effects are disturbing, more drugs are prescribed to counteract them. These drugs are known as anticholinergic (blocking certain nerve impulses), antiparkinsonian (Parkinson's disease is characterized by tremors and an odd gait), or side-effect medications. They produce side effects of their own, ranging from blurred vision to severe psychiatric symptoms such as hallucinations, delusions, and paranoia, and an increased risk of tardive dyskinesia. Some doctors maintain that when anticholinergics are used on a long-term basis, "irreversible mental deterioration" can result.<sup>81</sup>

In addition to antipsychotics and side-effect medication, mood stabilizers, antidepressants, tranquilizers, and/or anti-panic medications may be added to the schizophrenic's drug "cocktail." Most people with schizophrenia face a lifetime on these drugs because they are not a cure, but only a means of controlling the symptoms, and often not well at that.

There is no doubt that antipsychotic and other drugs save lives. The purpose of the previous discussion is not to advocate the elimination of these drugs, but to point out their dangers and the advisability of finding an alternative where possible. The latter is indicated, not only because of the negative effects of psychiatric medications, but also because the pharmacological model is basically flawed. Drugs do not address the underlying factors that cause or contribute to the condition. With drug-based treatment, these factors go uninvestigated and the best one can hope for is maintenance.

Natural medicine, on the other hand, is based on the knowledge that in order for comprehensive healing to occur, the factors causing or contributing to a disorder must be identified and addressed in each person. With this approach, it is possible for people with schizophrenia to get off their psychiatric drugs or significantly reduce their dosages and improve their present and future health. The next chapter explores the underlying factors that can play a role in schizophrenia.

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