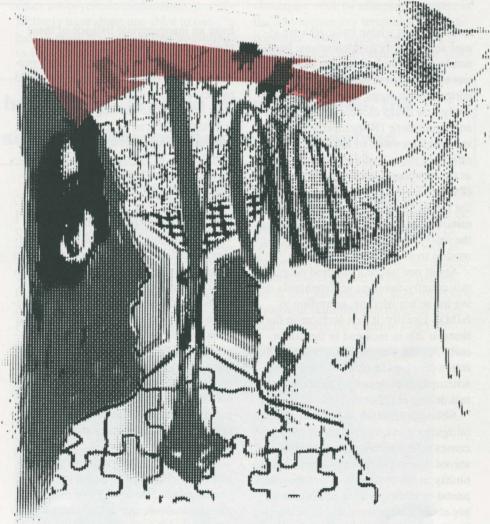
Real Lives, Imaginary Terror

Schizophrenia

Drugs,
Therapy
Can
Turn Life
Around
For Some



by Margie Patlak

"The visions are extremely vivid. Paving stones transform into demonic faces, shattering in front of my petrified eyes. When I am in contact with people, they can become grotesquely deformed, their skin peeling away to reveal decomposing inner muscles and organs. Buildings and rooms spin and weave and their walls close in as I look on, paralyzed by fear. ... The voices either ramble in alien tongues or scream orders to carry out violent acts. They also persecute me by way of unwavering commentary and ridicule to deceive, derange, and force me into a world of crippling paranoia."

-Robert Bayley, a schizophrenia sufferer, in Schizophrenia Bulletin, No. 4,

1996, published by the National Institute of Mental Health (NIMH).

More than 300,000 adults in this country are like Bayley, unable to distinguish their imaginations from reality. These people have schizophrenia, a

sity of California in Los Angeles.

Because the drugs that effectively treat schizophrenia affect the functioning of the chemical messengers in the brain known as neurotransmitters, some experts hypothesize that the disorder stems uting to this hampered logic is an inability to sort out relevant from peripheral information in a situation.

Another frequent symptom of schizophrenia is deadened emotional expression, indicated by a monotonous tone of

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mental illness whose hallmarks are visual and auditory hallucinations. Fortunately the living hell Bayley describes can often be alleviated with a number of antipsychotic drugs, including the relatively new drugs clozapine (Clozaril) and risperidone (Risperdal), which don't seem to have some of the limiting side effects of more traditional drugs, as well as the newcomer known as olanzapine (Zyprexa), which came on the market in the fall of 1996. The Food and Drug Administration is responsible for ensuring the safety and effectiveness of the drugs used to treat schizophrenia.

About one out of a hundred people in this country develops schizophrenia during his or her lifetime, according to NIMH. Usually, it first surfaces in the teens or 20s in men and in the 20s or early 30s for women. Schizophrenia rarely develops in children, and many schizophrenics appeared perfectly normal during childhood.

Although research has turned up some intriguing clues, the puzzle of what causes schizophrenia has yet to be solved. Some people may inherit susceptibility to the condition. A person with a parent or sibling who is schizophrenic has about a 10 percent risk of developing the condition, and half of all identical twins of schizophrenics also succumb to the mental illness.

Anatomy studies suggest the condition is not caused by damage to the brain, but rather due to faulty brain development. Studies show that exposure to viral infections during the second trimester and birth complications can boost the risk of developing schizophrenia, because the normal development of the brain may be altered, according to Stephen Marder, M.D., of the Univer-

from an inappropriate balance of these messengers in brain cells.

In some patients, schizophrenia is persistent, while others have remissions and exacerbations. Full recovery rarely occurs. Suicide rates among paranoid schizophrenics can be as high as 10 percent, according to study by Thomas McGlashan, M.D., of the Yale Psychiatric Institute, published in the February 1997 American Journal of Psychiatry.

Voices No One Else Can Hear

Schizophrenia is one of the most complex, puzzling and disabling of the major mental illnesses. People who suffer from this condition can have a number of different symptoms, the most prominent being hallucinations, delusions, disordered thinking and behavior, and abnormal expression of emotions. Hearing voices that other people don't is the most common type of hallucination in schizophrenia. Such voices may describe the patient's activities, carry on a conversation, warn of impending dangers, or tell the person what to do.

Another common symptom of schizophrenia is delusions of persecution or grandeur. As cited in an issue of *Schizophrenia Bulletin*, one schizophrenic, who was a computer programmer, imagined that the end of the world was coming and he determined which of his colleagues would survive in the afterlife by the keys he punched on the computer. Another patient, cited in an NIMH brochure, thought a neighbor was controlling his behavior with magnetic waves.

Schizophrenics often are not able complete a line of thought. Their thoughts come and go so rapidly it is not possible to "catch them." Fragmented thinking and conversing results. Contrib-

voice and flat facial expressions. "Her face was a solemn mask, and she could neither give nor receive affection," wrote Evelyn Smith of her schizophrenic daughter in *Schizophrenia Bulletin*, No. 4, 1991.

Schizophrenics also may show inappropriate emotions—a laugh in response to a tragic situation, for example. Some schizophrenics exhibit bizarre behavior, such as excessive activity that is apparently purposeless and not influenced by what is happening around them. In contrast, some schizophrenics may lapse into a catatonic state in which they are immobile and unresponsive.

To be diagnosed as schizophrenic, a patient needs to have two or more of any of these symptoms during a one-month period. However, some symptoms are more characteristic of schizophrenia and aid in more definitive diagnosis. For example, it is rare for people with other disorders to hear a voice commenting on their behavior or to hear two or more voices conversing with each other. Also key to the diagnosis of schizophrenia, is a significantly hampered ability to work or socialize for at least six months.

Before providing a firm diagnosis of schizophrenia, doctors need to rule out drugs as the cause. A number of illegal drugs, such as PCP (phencyclidine hydrochloride), or chronic use of high doses of amphetamines can cause some of the disorder's symptoms.

Treatment Revolutionized By Antipsychotics

A dismal outlook for schizophrenia was dramatically changed in the 1950s with the development of the

first antipsychotic drug, chlorpromazine (Thorazine). Since then, more than a dozen other similar-acting antipsychotic medications have been developed, including haloperidol (Haldol), thioridazine (Mellaril), loxapine (Loxatane), and molindone (Moban). These drugs work by blocking binding sites of the neurotransmitter dopamine. They are equally effective at stemming the delusions and hallucinations and bizarre behavior and speech experienced by schizophrenics, according to NIMH. What effects these older antipsychotic medications have on other symptoms of schizophrenia, such as flat-

studies show these drugs don't work in a little over one-quarter of schizophrenics who do take them, according to Lisa Dixon, M.D., of the University of Maryland in Baltimore. However, three drugs have come on the market during this decade that counter some of these problems.

New Drugs

Clozapine, which can only be used to treat patients who do not respond to other antipsychotic medications, can effectively treat about one-third to one-half of those non-responders, according to UCLA's Marder.

prone to seizures, and about 1 to 2 percent develop a paucity of infection-fighting white blood cells. This condition, known as agranulocytosis, can be fatal if not diagnosed and treated immediately. If detected and promptly treated, however, this condition is completely reversible. To detect agranulocytosis, patients who take clozapine must have weekly blood tests.

Unlike the older antipsychotics, studies suggest clozapine, risperidone and olanzapine work by affecting the action of the neurotransmitter serotonin, as well as dopamine. Some studies suggest that in addition to effectively stemming the hallu-

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tened emotions and apathy, is not as well documented. They also foster significant side effects that can limit their use.

When patients first start taking these antipsychotic drugs, they may be troubled by such side effects as drowsiness, restlessness, cramps, muscle spasms, dizziness, stiffness of the limbs, tremors, dry mouth, impotence, menstrual irregularities, or blurring of vision. Most of these can be corrected by lowering the dosage or can be controlled by other medications.

More problematic with the long-term use of older antipsychotic drugs is the development of a disorder known as tardive dyskinesia (TD), a disorder that causes involuntary movements. Patients with TD may frequently grimace, frown, smirk, or experience facial tics. They may also flick or jerk their trunk, pelvis, arms, or legs. The risk of developing TD increases with the length of drug treatment and occurs in more than one-quarter of patients who have been receiving antipsychotic drugs for more than five years. In some patients, symptoms of TD may be reversed or reduced by altering the dosage of antipsychotic medication or by treating them with a different antipsychotic.

Because of the side effects, many patients do not comply with taking older antipsychotic medications. In addition,

Although it can make patients more prone to seizures, clozapine appears to cause less cramping, tremor, muscle stiffness, and restlessness than some of the older antipsychotics, and it has been suggested that clozapine may be less likely to produce TD, although the evidence on the latter is not yet definitive. However, it can make patients more

cinations and bizarre behavior of schizophrenics, these newer antipsychotic drugs can also help counter what are known as "negative symptoms," such as the social withdrawal, apathy, and paucity of emotions expressed by these patients. But as Thomas Laughren, M.D., of FDA's division of neuropharmacological drugs, notes, because the effect of older anti-



One of Vincent Van Gogh's most famous paintings is "The Starry Night," above. Many medical scholars believe that one source of Van Gogh's psychiatric problems may have been schizophrenia.

psychotic medications on these symptoms has not been well characterized, it is not clear whether the newer drugs have an advantage over the older ones in relieving them. "There's not sufficient evidence to conclude that risperidone or olanzapine are superior to older antipsychotics regarding negative symptoms," he said.

He added that studies with both risperidone and olanzapine suggest that they are no more likely than placebo to cause muscle stiffness, cramps, restlessness, and tremors, especially at the lower recommended doses. However, there are not sufficient data to conclude definitively that either of these newer drugs is superior to the older antipsychotic drugs in regards to these immediate side effects or the more chronic development of TD. There are a number of side effects associated with both the older and newer drugs, including sleepi-

and 20 percent of schizophrenic patients experience a relapse in any one year despite continued medication, according to John Kane, M.D., of the Albert Einstein College of Medicine in the Bronx.

Although there are injectable forms of antipsychotics, patients usually take these drugs orally. There is insufficient evidence to know whether they are associated with birth defects. Because these drugs can be passed to a baby via breast milk, schizophrenic mothers are usually discouraged from breast-feeding.

Other Treatments

Because some patients receive only partial relief of their symptoms from antipsychotic medications, doctors may prescribe additional medications. Studies suggest the addition of anti-anxiety medications such as lorazepam (Ativen) or alprazolam (Xanax) helps about half of schizophrenics, according to James

many patients find the addition of individual, family or group psychotherapy to be helpful. According to Jack Scott, M.D., of the Maryland Psychiatric Research Center in Baltimore, recent studies indicate that supportive realityoriented therapy aimed at developing practical interpersonal skills is generally of more benefit to schizophrenics than more probing psychoanalytic or insightoriented psychotherapy. Rehabilitation programs that emphasize job counseling and training, problem-solving and money management skills, use of public transportation, and social skills training are often essential.

Although there currently is no cure for schizophrenia, the present array of drugs available often can effectively control many of the disorder's symptoms and enable patients to lead more satisfactory lives. A review of the life histories of almost 2,000 patients diag-

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ness, weight gain, and sexual problems.

To minimize side effects, psychiatrists usually treat schizophrenics with the lowest dose of an antipsychotic drug that diminishes symptoms during an episode of worsening symptoms. After that episode subsides, the doctor usually will taper the dosage slowly to the lowest possible level to keep symptoms at bay. In a few circumstances, especially when symptoms are mild and patients are particularly resistant to taking medication, treatment may be discontinued.

Several studies indicate that schizophrenics who are not receiving maintenance treatment with an antipsychotic drug following an acute episode are at much greater risk of experiencing a relapse, according to Dixon. Consequently, many schizophrenic patients continue taking antipsychotic medication for the rest of their lives. Some may be able to take very low doses except when symptoms are severe. Between 15

Thompson, M.D., of the University of Maryland in Baltimore. He noted that a smaller percentage of patients also appear to receive some benefit from lithium and carbamazepine, which are also used to treat manic depression. Some studies cited by Thompson also suggest that antidepressants such as fluvoxamine may help diminish the depression, emotional blunting, and inability to speak some schizophrenic patients experience. However, since no pharmaceutical companies have sought FDA approval for antipsychotic claims for these drugs, FDA has not evaluated whatever data support such claims and, consequently, has not approved their use for schizophrenics.

Shocking patients with electricity, called electroconvulsive therapy, one of the earliest treatments of schizophrenia, is rarely used today because the benefits have not been definitively shown.

Once antipsychotic medications have helped stem schizophrenia's symptoms,

nosed with schizophrenia suggests that one-quarter achieve full remission, half recover at least partially, and one-quarter require long-term care, according to NIMH. It is unknown whether better results might be garnered with the newer antipsychotic drugs now on the market.

With appropriate treatment, many schizophrenics have been able to turn their imaginary hells into less terrifying and more fertile grounds. Bayley, for example, has transformed many of his bizarre visions into oil paintings and musical compositions. He notes that much can be gained by "tapping into a mind experiencing the truly extraordinary." He also advocates greater compassion for schizophrenics. "It is often forgotten that there is a person behind the condition, with a fundamental need to be understood," he wrote.

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