WARNING!
When trying to withdraw from many psychiatric drugs, patients can develop serious and even life-threatening emotional and physical reactions. In short, it is dangerous not only to start taking psychiatric drugs but also can be hazardous to stop taking them. Therefore, withdrawal from psychiatric drugs should be done under clinical supervision. Principles of drug withdrawal are discussed in *Your Drug May Be Your Problem: How and Why to Stop Taking Psychiatric Medications*, by Peter R. Breggin, M.D. and David Cohen, Ph.D. Other information on Prozac and Prozac-like drugs can be found in *Talking Back to Prozac* by Peter R. Breggin, M.D. and Ginger Ross Breggin.

Excerpts from *Toxic Psychiatry*, Chapter 11 by Peter R. Breggin, M.D.

Suppressing the Passion of Anxiety Overwhelm with Drugs: The Minor Tranquilizers, Including Xanax, Valium, BuSpar, Ativan, and Halcion, and the Antidepressant Anafranil

Just as the 1980s was the decade in which those suffering from various forms of depression were identified and treated, so, [NIMH director Lewis] Judd and other specialists hope, the 1990s will be the era when the recognition and treatment of anxiety disorders predominate. Judd recently announced that NIMH will launch a national education and prevention campaign, which, he says, "will be pointed toward early identification and diagnosis."

From the U. S. Congress to the American public, psychiatry's marketing strategy for the 1990s aims at people who feel anxious. It has become an axiom within modern economics that advertising actually creates consumer needs. By targeting people suffering from anxiety, psychiatry should be able to generate an unlimited demand for its drugs. Prescriptions for one class of these drugs, the benzodiazepines, already are estimated at nearly one hundred million a year in the United States, for a cost of about $500 million. Some estimates place the total cost at $800 million or more.

This chapter will give special attention to two minor tranquilizers that have drawn considerable publicity. One is BuSpar (buspirone), whose potentially damaging effects have been largely ignored, even in the psychiatric literature. The other is Xanax (alprazolam), one of the most intensively marketed and yet dangerous drugs in psychiatry. Then chapter 15 will focus on the political campaign that made Xanax so successful. [webmaster note: this information can be found in *Toxic Psychiatry* by Dr. Breggin]

Unlike most of the drugs discussed in this book, the minor tranquilizers are highly sought after. Even without doctors pushing them, people would want them. Indeed, they are actively sold illegally on the street. This is not surprising, since people often resort to taking anything that promises even temporary relief from anxiety. Millions drink alcohol, smoke cig-arettes, and use marijuana, opiates, and other street drugs. Others eat excessively, exercise compulsively, work to exhaustion, watch TV endlessly, escape into books, relentlessly pursue sex, and overindulge any number of otherwise harmless habits in an attempt to escape their tensions and apprehensions. In chapter 10 we saw that obsessions, compulsions,and phobias also can be seen as efforts to control anxiety. Overall, psychiatric interventions play a relatively minor role in humanity's never-ending struggle to deal with anxiety.

The Minor Tranquilizers and Other Sedative-Hypnotics

Among psychiatric medications for the treatment of anxiety, the most commonly used are the minor...
tranquilizers, starting in 1957 with the introduction of Librium (chlordiazepoxide). In the 1970s the minor tranquilizer Valium (diazepam) topped the charts as the most widely prescribed drug in America, to be replaced by Xanax in 1986. Most of the minor tranquilizers belong to the group called benzodiazepines and are closely related chemically to Librium, Valium, and Xanax. They differ mostly in their duration of action and in the dosage required to achieve the same effect. *They have nearly identical clinical effects.*

The benzodiazepine minor tranquilizers include Xanax, Valium, Librium, Tranxene (clorazepate), Paxipam (halazepam), Centrax or Verstran (prazepam), Klonopin (formerly Clonopin) (clonazepam), Dalmane (flurazepam), Serax (oxazepam), Ativan (lorazepam), Restoril (temazepam), and Halcion (triazolam).

An older minor tranquilizer is Miltown or Equanil (meprobamate). (*The drugs are called "minor" tranquilizers to distinguish them from "major" tranquilizers, but nowadays the latter are called neuroleptics or antipsychotics. While the minor tranquilizers might now simply be called tranquilizers, that term itself is somewhat misleading. Basically they are sedatives.)

Other minor tranquilizers are chemically antihistamines, such as Atarax or Vistaril (hydroxyzine).

Sleeping medications also have tranquillizing effects. These include Doriden (glutethimide), Noludar (methyprylon), Placidyl (ethylchlorvynol), and Noctec, Somnos, or Beta-Chlor (chloral hydrate), and the various barbiturates, including Seconal (secobarbital), Luminal (phenobarbital), Butibel (butabarbital), Amytal (amobarbital), Nembutal (pentobarbital), and Tuinal (amobarbital and secobarbital).

All of these drugs have the potential for abuse and addiction. Since all have a calming or sedative effect, people addicted to these "downers" use many of them interchangeably, depending on what is available, often mixing them with alcohol. The minor tranquilizers and alcohol make a very dangerous, frequently lethal, combination.

BuSpar, the most recent addition to the minor tranquilizers, is being promoted as non-sedative, non-addictive, and relatively safe.

**The Most Widely Used Psychiatric Drugs**

According to FDA data reported by Carlene Baum and her associates in the February 1988 *Medical Care*, there was a dramatic decline in the use of minor tranquilizers and other antianxiety drugs, from a peak of 103 million prescriptions in 1975 to 67 million in 1981 in the United States. There are no complete totals available for recent years, but the APA's task force report, *Benzodiazepine Dependence, Toxicity and Abuse* (1990), estimates that annual prescriptions for benzodiazepines have leveled off since the mid-1980s at about 61 million.

The minor tranquilizers, now led by Xanax, remain by far the most commonly prescribed psychiatric medications. In some countries, such as France, the use of these agents continues to escalate.

Most minor tranquilizer prescriptions—65 percent—were for women in 1984. However, women predominate in all psychiatric drug categories. Thirty-five percent of all patients were sixty years of age or older.

**Are the Minor Tranquilizers Something New?**

Because of the popularity surrounding the minor tranquilizers, we tend to think that they represent
something very new and radically different among drugs; but I recall my medical school professor of psychopharmacology reminding us in 1960 that the sedative attributes of minor tranquilizers differ little from those of the barbiturates, such as phenobarbital.

**Sedative-Hypnotics and Central Nervous System Depression**

All of the commonly used minor tranquilizers—with the possible exception of BuSpar—are central nervous system depressants very similar to alcohol and barbiturates in their clinical effects. Along with alcohol and barbiturates, they are classified as sedative-hypnotics, meaning that they produce relaxation (sedation) at lower doses and sleep (hypnosis) and eventually coma at higher ones. It is important to grasp the principle that minor tranquilizers are central nervous system depressants—and, in particular, sedative-hypnotics—because this classification removes the mystery surrounding these "tranquilizers." The so-called antianxiety effect is merely an early stage of central nervous system depression—sedation. The basic clinical effect on the mind cannot be distinguished from alcohol or barbiturates.

It should be emphasized again that all minor tranquilizers combine with each other or with other central nervous system depressants—such as barbiturates, antidepressants, neuroleptics, lithium, and alcohol—with a potentially fatal result. While they can be lethal when taken alone, they are especially dangerous in combination with these other drugs. A large percentage of drug-related emergency room visits involve minors tranquilizers.

All of the minor tranquilizers impair mental alertness and physical coordination and can dangerously compromise mechanical performance, such as automobile driving.

At low doses the minor tranquilizers are sufficiently potent to impact noticeably on the brain waves on routine EEGs, especially in the frontal lobe region. However, they do not typically have the lobotomizing impact epitomized by the neuroleptics.

**Addiction, Tolerance, and Withdrawal Symptoms**

All hypnotic-sedatives, including the minor tranquilizers, are habit forming and addictive and can produce withdrawal symptoms or an abstinence syndrome when they are stopped. In the extreme, the abstinence syndrome can cause life-threatening neurological reactions, including fever, psychosis, and seizures. Less severe withdrawal symptoms include increased heart rate and lowered blood pressure; shakiness; loss of appetite; muscle cramps; impairment of memory, concentration, and orientation; abnormal sounds in the ears and blurred vision; and insomnia, agitation, anxiety, panic, and derealization. Obvious withdrawal symptoms typically last two to four weeks. Subtle ones can last months.

Consistent with the principle that the minor tranquilizers differ little in their clinical effect from other sedatives, the Xanax write-up in the 1991 PDR acknowledges that withdrawal symptoms are "similar in character to those noted with barbiturates and alcohol."

Studies of Xanax (see ahead) show that most patients develop withdrawal symptoms during routine treatment lasting only eight weeks. Tolerance, or the need for increasing doses to achieve the same psychoactive effect, is the underlying physical mechanism of addiction. Within two to four weeks, tolerance can develop to the sedative effect of minor tranquilizers taken at night for sleep. This again warns against the use of these drugs for more than a few days at a time.

The short-acting benzodiazepines can produce especially severe withdrawal symptoms, because the
drug is cleared from the body at a relatively rapid rate. These include Xanax, Halcion, Ativan, Restoril, and Serax. However, according to expert Louis Fabre in a February 1991 interview with me, tightness of binding to receptors is probably more indicative of addictive potential, and the most tightly binding are Xanax, Halcion, Ativan, and Klonopin.

Individuals who take only one pill daily for sleep or anxiety are not exempt from withdrawal problems. In my private practice during the last few years I have worked with several people who were unable to stop taking a once-a-day standard dose of Xanax, Ativan, Klonopin, or other minor tranquilizers. In each case, the attempt to stop the medication led to a disturbing degree of anxiety or insomnia within twenty-four hours. The problem seemed to be caused by rebound anxiety or rebound insomnia (see ahead). In a personal communication in late December 1990, internist John Steinberg confirmed that patients taking one Xanax tablet each day for several weeks can become addicted. Steinberg is medical director of the Chemical Dependency Program at the Greater Baltimore Medical Center and president of the Maryland Society of Addiction Medicine. He points to research that Xanax and other short-acting benzodiazepines can cause a reactive hyperactivity of the receptors that they block. The hyperactive receptors then require one or more doses of Xanax each day or they produce anxiety and emotional discomfort. Steinberg calls the impact of Xanax "a fundamental change in the homeostasis of the brain." After the patient stops taking the Xanax, according to Steinberg, it takes the brain six to eighteen months to recover. Xanax patients should be warned, he says, that it can take a long time to get over painful withdrawal symptoms. Since doctors frequently don't realize this, they, too, are likely to be confused and to continue the drug in the hope of "treating" the patient's drug-induced anxiety and tension.

Many detoxification beds are occupied by patients addicted to minor tranquilizers and even more by those who are cross-addicted with alcohol and other drugs. Steinberg says that Xanax is "by far and away" the worst offender and that it definitely causes addiction without being mixed with other sedatives. Steinberg estimates that one in ten patients receiving Xanax will become addicted. * (Based on an estimated fifteen million people receiving Xanax each year in the United States, Steinberg concludes that 1.5 million Xanax addicts are produced each year.

(* Steinberg does not use the term addiction loosely. By addiction he means that the patient periodically loses control of his or her drug intake and has a pattern of compulsive use, despite adverse consequences. If Steinberg were merely speaking of habituation, or difficulty stopping the use of the drug, his estimates would be much higher. He considers Xanax "very easily habituating" and observes that people are especially susceptible to the initial "euphoria or disinhibiting effect" that it has in common with alcohol. l)

**Rebound Anxiety and Insomnia**

Rebound anxiety is one of the common reactions to withdrawal or to dose reduction of a minor tranquilizer. As with most psychiatric drugs, the use of the medication eventually causes an increase of the very symptoms that the drug is supposed to ameliorate, and thus rebound anxiety can lead to a false diagnosis of chronic anxiety disorder. As noted in the American Psychiatric Press *Textbook of Psychiatry*, long-term treatment can be erroneously maintained or reinstated when drug-induced rebound anxiety occurs. Addiction is the ultimate outcome.

Some experts, such as John Steinberg, disagree with my assertion that there is no difference between a tranquilizing and a sedative effect. They suspect that in addition to the obvious sedation, minor tranquilizers probably also produce a specific inhibition of anxiety. If true, this means that they also cause a specific rebound anxiety as the blocked receptors become hyperactive.
Rebound insomnia also results from taking most sleeping medications, because the brain reacts against the central nervous system (CNS) depressant effects by becoming more aroused or alert. Medications for sleep generally should not be taken for more than a day or two at a time.

Addiction Can Go Unnoticed

Seriously addicted patients may show no outward signs to their family or physicians until accidentally removed from the medication — for example, following surgery or during a medical emergency. Their withdrawal symptoms may then be wholly misinterpreted as an aspect of some other disorder or as a psychological problem. Marked withdrawal symptoms, including persistent rebound anxiety, can begin as much as five to seven days after stopping the medication and can last up to a month.

Paradoxical Reactions

The minor tranquilizers can produce paradoxical reactions—acute agitation, confusion, disorientation, anxiety, and aggression—especially in children, adults with brain disease, and the elderly. The Xanax report in the 1991 PDR states, "As with all benzodiazepines, paradoxical reactions such as stimulation, agitation, rage, increased muscle spasticity, sleep disturbances, hallucinations and other adverse behavioral effects may occur in rare instances and in a random fashion."

In nursing homes the medications may seem to help the insomnia of an elderly patient for a night or two, only to produce generalized brain dysfunction as the medication accumulates in the system. The agitated patient may then be mistakenly overdosed with further medication, perhaps a neuroleptic. According to Robert Hales and Stuart Yudofsky's Textbook of Neuropsychiatry (1987), the "routine" prescription of these medications in nursing homes and hospitals "should be avoided," especially for anything but brief periods of insomnia related to a particularly difficult or stressful situation.

As in response to alcohol, some people more readily lose their self control and become violent when taking minor tranquilizers. There are frequent references to this in the literature, including cases of murder under the influence of minor tranquilizers. Partly because of this disinhibiting effect, the drugs cannot be used effectively for purposes of controlling behavior within institutions.

Halcion has been especially implicated in causing aggressive and suicidal behavior, as well as delirium, hallucinations, and seizures.

Memory Dysfunction from Minor Tranquilizers

Recently there has been much-publicized concern about Halcion producing amnesia for events prior to the taking of the drug. However, this has long been an unheralded problem with minor tranquilizers in general. Years ago I recall noticing that patients who mixed alcohol with Valium the night before a psychotherapy session sometimes would have severe black-out spells and could not recall much of the prior evening. It is well known that the intravenous infusion of benzodiazepines, such as Valium or Ativan, typically produces a similar amnesia for the several hours surrounding the infusion. While this may be a benefit in forgetting the painful effects of surgery, it becomes a potentially serious problem in the routine use of the minor tranquilizers for anxiety or sleep disorders and can interfere with psychotherapy, studying, learning anything new, or recalling previously retained memories. 7

Long-Term Effects on Mental Function from the Minor Tranquilizers

Despite the obvious need for concern, few studies have attempted to measure the impact of long-term minor tranquilizer usage on overall mental function. Susan Golombok and her colleagues from the
Institute of Psychiatry in London published "Cognitive Impairment in Long-Term Benzodiazepine Users" in the 1988 Psychological Medicine. Using a variety of neuropsychological tests to evaluate the impact of minor tranquilizers on cognitive function in patients who were administered the medication for at least one year, they found chronic impairment in measures of visual-spatial ability and attention span.

Golombok and her coworkers were unable to follow up with tests after drug termination. However, these findings of chronic brain dysfunction raise a serious concern about possible permanency. The investigators comment: "It is impossible to determine how long it is safe for a patient to continue to take benzodiazepines, or at what dose, before cognitive ability will begin to deteriorate. Nevertheless, it is clear from the inspection of our data that taking a low dose for a short time has little effect, while a high intake is almost always certainly harmful." (P. 371)

The test results indicate that "these patients are not functioning well in everyday life," while they remain unaware of their impairment: "This is in line with clinical evidence that patients who withdraw from their medication often report improved concentration and increased sensory appreciation and that only after withdrawal do they realize that they have been functioning below par.... It appears, therefore, that not only are long-term benzodiazepine users at risk of dependence, but that cognitive impairment also represents a very real hazard." (P. 373)

It cannot be overemphasized that brain-disabling treatments render patients less able to evaluate their own dysfunction. The Golombok study is exceedingly important from the viewpoint of the patient who wishes to avoid brain dysfunction and from the viewpoint of the ethical physician who wishes to avoid causing it in his or her patients.

If doctors wish to prescribe minor tranquilizers or if patients want to take them, it would be prudent to follow the advice of The New Harvard Guide to Psychiatry (1988): "The main usefulness of the antianxiety agents is in general medicine in the short-term treatment of relatively transient forms of anxiety, fear, and tension" (p. 524).

Brain Shrinkage from Long-Term Minor Tranquilizer Use

An even more terrifying specter haunts the long-term use of minor tranquilizers—the possibility of brain atrophy. Although rarely mentioned in establishment books or reviews, in their letter to the editor in the July 1989 Archives of General Psychiatry, Isaac Marks and his ten colleagues summarize the as yet brief literature: "The cerebral ventricular enlargement reported in patients with anxiety/panic disorders who were long-term benzodiazepine users could be due to the disorder or to other factors rather than to the drugs, but wisdom advises caution" (p. 669). In fact, the cerebral ventricular enlargement—the equivalent of atrophy of the brain—is most likely due to the drugs. C. Schmauss and J-C. Kreig in "Enlargement of Cerebrospinal Fluid Spaces in Long-Term Benzodiazepine Abusers" in the 1987 Biological Medicine found that "our data suggest that the increase in the VBRs [ventricular enlargement] is dose-dependent on long-term BDZ [benzodiazepine] medication" (p. 873).

I mentioned the studies on brain atrophy to one expert who replied that although he had not heard of them, he was not surprised. "The minor tranquilizers are like alcohol," he observed, "and alcohol when used long-term causes brain shrinkage." He asked to remain anonymous for fear of offending other drug experts.

[webmaster note: full references, footnotes and further sections of this chapter can be found in Toxic Psychiatry, by Peter R. Breggin, M.D.]