

The Biochemistry of PTSD

Like the rest of the body, your central nervous system is vulnerable. Given enough physical or emotional stress it too can bend or even break. When you experienced your trauma, your central nervous system received a series of shocks. The greater the intensity and the longer the duration of the trauma, the greater the possibility that the delicate biochemical balances of your body might have been disrupted.

Despite an increase in research in to the biochemistry of PTSD in recent years, there is no single definitive theory as to how trauma affects the body. One theory is that trauma destabilizes the autonomic nervous system; another is that trauma changes body chemistry so that the individual is more prone to anxiety. Yet another hypothesis is that trauma disrupts certain specific biochemical balances, for example, catecholamine levels (Munroe 1995, McFarlane 1995).

No single biological explanation is satisfactory in that no one theory can explain the wide range of PTSD symptoms in trauma survivors. It is an established fact that PTSD, for some trauma survivors, has both physical and emotional effects.

However, the biochemical shifts that can occur as a result of trauma do not happen to every trauma survivor. Just because you lived through a trauma, does not necessarily mean that your biochemistry has changed.

If you are a one-time trauma survivor, many of these biological changes may not apply at all, or they may apply only under very limited circumstances. But there are no hard and fast rules. For example, children who witness the violent deaths of family members or friends can suffer from biological changes just as readily as soldiers who spent time in prisoner-of-war camps. Incest survivors, refugees, battered wives, abused children, prisoners of war, combat soldiers with extended tours of duty, and others who have endured long-term, repeated, or severe trauma are those most likely to be affected.

As you read on in this chapter, you may be able to determine whether or not your biochemistry was affected by the trauma you endured. If, in fact, your biochemistry was altered by the trauma, you will likely have experienced certain problems. These problems include difficulties in thinking clearly, in regulating your emotions, in relating to other people, and critically important, in sustaining hope for the future. Trauma-induced biological changes can also lead to or contribute to the development of clinical depression or a substance-abuse problem. These conditions are the subjects of later sections in this chapter.

Biological Changes and the Healing Process

Some trauma-induced biological changes are linked to memory tracts in the brain. Almost automatically, in the presence of people, places, objects, or situations that remind you of the traumatic event, these biochemical changes can trigger either the reexperiencing phase or the numbing-avoidance phase of PTSD. As discussed in Chapter 1, in the reexperiencing phase you can expect to have memories, dreams, or flashbacks of the trauma. In the numbing-avoidance phase you can expect to feel shut down inside and to want to withdraw from others.

Because of these biological changes, you may have periods when, against your will, you feel as if you were still living under the conditions of the original traumatic event. You may know—and perhaps your therapist, family members, and friends are telling you—that you're safe and the danger is past. Biochemically, however, your body is screaming "It's still going on. Can't you feel it?"

Even if you have tried with all your might to erase the trauma from your mind, like almost all trauma survivors you probably found yourself unable to do so. If the alterations in your biological makeup are significant enough, under certain circumstances, your body and mind may involuntarily revert to the emotional climate and mindset of the original traumatic event. And sadly, in ignorance of the biology of PTSD, you may have concluded that you were a failure for being unable to control your reactions. If this is starting to sound terribly dire and frightening, bear in mind that even if your central nervous system has been affected, you can minimize many of the negative biological effects. You can counteract these effects by gaining some knowledge of the biology of PTSD and by working toward healing with the help of this book and your therapist. If necessary, certain medications can also help. Using all these tools, you need not be a prisoner of your past.

For example, at the very minimum you can learn to anticipate and prepare for—rather than panic in response to—some of your PTSD-related reactions. You may be unable to eliminate some of your reactions, but you can learn to manage them, instead of letting them control your actions. You may not be able to eliminate all the pain and distress that

affect your PTSD reactions, but you can learn to respond increasingly in a way that best meets your goals in any specific situation.

This chapter briefly presents some of the biological aspects of PTSD, and then shows how they are related to clinical depression and substance abuse. You will be guided in determining if, in addition to (or as a result of) PTSD, you suffer from depression or a substance abuse problem. If so, you will need specialized counseling for these problems.

The Role of the Adrenals

In the last chapter, you read about the fight-or-flight and freeze reactions that human beings have in response to life-threatening situations. The source of these reactions is the adrenal glands: two diamond-shaped organs located on top of the kidneys. In response to the threat of danger, the adrenal glands secrete large doses of either adrenaline or noradrenaline. Adrenaline provides a supercharge of energy, which enables people to move with more speed and power than usual. In contrast, noradrenaline makes people freeze or go numb. This reaction is similar to the way some animals play dead when threatened.

During adrenaline surges, the heart rate increases, the pupils dilate, digestion slows down, and blood coagulates quicker, to prevent too much blood being lost. The lungs become more efficient, providing the increased oxygen necessary to fight back or run away as powerfully as possible. The increased oxygen can also vastly improve the acuteness of the senses and the mind's alertness. Sounds, smells, and other sensory data, for example, are perceived more vividly. The brain uses this sensory data to assess the situation, thus maximizing the chances for survival. Due to the increased oxygen, the brain can work more quickly and efficiently to make the best decisions possible. Consider the following example.

On her way to the babysitter's house with her small daughter, Mary realized she had forgotten to bring diapers. So when she passed a convenience store, she decided to run in and buy some. Thinking it would only take a second, she left her baby in the car. But when she came out of the store a minute later, her car was rolling backwards down the hill, toward a busy intersection.

Although Mary was 50 pounds overweight, had not exercised in years, and the glasses she needed for distance vision were in the car, the adrenaline surge she experienced enabled her to clearly see the traffic at the bottom of the hill, and she was able to run fast enough to stop the car before it rolled into the traffic. Not only that, but by herself she pushed the car back up the hill into the parking lot.

Remembering the incident she said, "I didn't think—I just reacted. I felt like a wild animal being chased by tigers.

Knowing that my baby was in that car made me run faster than I've ever run in all my life. I guess it was stupid of me to shove the car all the way back up the hill. I could have really hurt myself, but I had all this energy. I was so charged up I just didn't think."

If, on the other hand, Mary's adrenals had pumped her with noradrenaline, instead of a fight-or-flight reaction, she could simply have frozen, as Sarah did.

Sarah was sitting by her living room window watching her husband show their baby daughter the roses twining on the fence, when suddenly a dog jumped over the fence and attacked the child.

Though Sarah was a pediatric nurse who had seen many injuries and illnesses, at the sight of her own child being harmed, she became immobilized, unable even to call for help. Fortunately, her husband had an adrenaline reaction that enabled him to save the child. Afterwards, however, Sarah's self-recriminations for her temporary paralysis were enormous.

Similarly, soldiers in battle, victims of rape and battering, survivors of natural catastrophes, and victims of muggings sometimes report having frozen or been unable to act. Combat medics, rescue workers, firefighters, and others on whom people depend for quick, decisive action, frequently suffer massive guilt because during a particular episode they "went limp," "couldn't think," or "couldn't do anything." The truth is, however, that these individuals, like Sarah, probably couldn't help it. They were not experiencing a failure of courage or a lack of dedication, but were most likely having an involuntary noradrenaline freeze reaction.

At first glance, an adrenaline surge may seem preferable to a noradrenaline response. However, adrenaline surges can be highly problematic, because they cannot be turned off at will.

Just as Mary used her excess adrenaline to push the car up the hill, soldiers in battle are easily tempted to discharge their excess adrenaline through abusive violence, needless killings, or other acts of destruction. And the same dynamic might apply to some police officers or others involved in security work. Although the adrenaline surge does not excuse excessive violence, even in battle, the hyperalert adrenaline surges triggered by pursuit or combat do play an undeniable role in incidents of excessive violence.

Adrenaline and Trigger Situations

The adrenaline surge is also a major contributor to the hyperalert symptoms of PTSD: the startle response, insomnia, nightmares, and so

on. If you suffer from PTSD, situations that remind you of the original traumatic event can trigger an adrenaline surge. The adrenaline surge then in turn activates memories and feelings associated with the traumatic event, leading to extreme distress. You may become agitated, irritable, or even have rage reactions, increased night terrors, or flashbacks. Alternately, you may have a numbing reaction after exposure to a person, place, or object reminiscent of the original traumatic situation. Or you may alternate between reexperiencing the trauma and shutting down.

Since both hyperalertness and numbing can be painful, you may find yourself avoiding trigger situations—those that remind you of the original traumatic event. Such avoidance behavior may limit your opportunities and options. On the other hand, staying away from or minimizing your contact with situations that trigger your PTSD symptoms makes perfect sense emotionally. In either case, there may be trigger situations you cannot or do not wish to avoid because they potentially enrich your life. The exercises on coping with triggers in Chapter 5 will provide you with suggestions and guidelines for managing your reactions and reducing your stress levels in distressing situations.

When Stress Is Prolonged

The adrenals, like the rest of the body, are not designed to handle prolonged stress. When subjected to repeated trauma or emergencies, the adrenals can be permanently damaged—leading to overfunctioning during subsequent stress, which causes the hyperarousal and numbing phases of PTSD.

Under severe stress, in addition to massive secretions of adrenaline or noradrenaline, a variety of neurotransmitters are released. Neurotransmitters are the chemical substances that enable impulses to be transmitted from one nerve cell to another (Bourne 1990). Among their many functions, neurotransmitters help regulate the intensity of emotions and moods.

If you were subjected to repeated or intense trauma or stress, certain of your neurotransmitters may have been depleted. The lack of these "buffer" neurotransmitters can lead not only to clinical depression, but to mood swings, explosive outbursts, overreactions to subsequent stress, and the startle response. Depletions of some neurotransmitters can result in overdependence on other people, feelings of I can't make it without you, or its opposite, an unrealistically independent or counterdependent stance of I don't need anyone; I can make it on my own. The learned helplessness syndrome is another possible development.

The **Learned Helplessness Syndrome**. In a famous series of experiments conducted by Martin Seligman (1975), animals were subjected to electric shocks from which they couldn't escape. No matter what they did, or didn't do, they couldn't stop the pain. At first the animals fought, tried to get away, and uttered cries of pain or anger. Then they sank into

listlessness and despair. Later on, in a second set of experiments, the same animals were shocked again—only this time, by pressing a certain lever or completing some other simple task, they could stop the electric current. But they made no effort to do so.

The animals had learned to be helpless. Due to their previous experiences, even when a means of escape from the pain was provided, these animals were too defeated, perhaps too affected neurologically, to take the simple action that would end their suffering.

The result of these experiments was Seligman's learned helplessness theory. This theory has been applied not only to traumatized animals, but to human beings trapped in inescapable negative circumstances—individuals who have been traumatized. According to Seligman (1975), "When an organism has experienced trauma it cannot control, its motivation to respond in the face of later trauma wanes. Moreover, even if it does respond and the response succeeds in producing relief, it has trouble learning, perceiving, and believing that the response worked. Finally, its emotional balance is disturbed; depression and anxiety, measured in various ways, predominate."

Since Seligman's original studies, much more work on learned helplessness has been completed. This new research shows that animals subjected to inescapable shock have some of the same neurotransmitter depletions as animals separated from their mothers at a very young age. (Both electric shock and separation are considered traumas.) In addition, both the shocked and the separated animals have the same kinds of neurotransmitter depletions as humans who have endured prolonged stress. Both sets of animals also exhibit the hyperalert stage of PTSD, with overactivity and outbursts of anger and aggressiveness, followed by numbing or listlessness and despair and a lack of interest in food, sex, and play (van der Kolk 1988b, Rossi 1986).

A variety of trauma survivors—notably abused women and children, prisoners of war, concentration- or refugee-camp survivors, and torture survivors—have been shown to be especially vulnerable to developing learned helplessness syndrome. For example, one major reason abused persons have difficulty leaving their abusers and striking out on their own is learned helplessness. Similarly, prisoners of war and some combat veterans also struggle long after they have been released from prison camps or military duty with the passivity, anxiety, and depression that comes with having learned to be powerless.

If you have been subject to ongoing physical or sexual abuse or other forms of repeated trauma, you may be at special risk for having acquired the learned helplessness syndrome to some degree. However, learned helplessness is not irreversible. You can, with effort and support, unlearn what the trauma ingrained. One step at a time, you can learn to take more and more control over your life. And each small success will encourage you to take the next risk and the next step. Exercises in Chapter

10, on empowerment, are specifically designed to help you overcome learned helplessness and take stock of your progress.

However, if as a result of the biological aspects of PTSD you have developed a clinical depression or a major substance abuse problem, then you must first get special assistance with these problems. You will be severely impeded in achieving your goals if either of these problems is left untreated.

Depression

Depression is by far the most common psychiatric problem in our country. Many mental-health professionals estimate that one-third of adult women and one-tenth of adult men can expect to suffer from at least one bout of depression in their lifetime (Beck 1973, Rovner 1991). Unfortunately, very few of these individuals recognize the symptoms. Even if they do, they often fail to get help. Don't you be one of them. Like PTSD, depression is a highly treatable condition. There is no necessity for, or purpose in, continuing to suffer needlessly.

What Is Depression?

Everyone has "the blues" from time to time, and when it happens, we often say we're depressed. There is a difference, however, between those feelings and biochemical or clinical depression.

For example, depression is part of the grieving process. However, the depression that is part of the five stages of grief (denial, anger, bargaining, depression, and acceptance) does not constitute true clinical depression. In normal grieving, the depression tends to lessen over time—although it may take years. In clinical depression, however, the sadness tends to grow over time. Other components of clinical depression include mixed feelings towards oneself and others and/or active self-hatred and physiological problems such as sleep disturbances and fatigue. Indecision, inability to concentrate, memory problems, lowered sex drive, confusion, and crying spells are other symptoms.

In clinical depression, the negative feelings are so overwhelming that they impair your ability to function. You can't make it to work, or it is a struggle to get there. You stop going out. You avoid socializing. The smallest task seems like a monumental chore, and you can't concentrate enough to finish a newspaper article, much less a book. You have trouble meeting the most basic obligations to your family or yourself. Indecision plagues you.

The symptoms of depression are not only painful in themselves, but they create fear. When you can't concentrate on the task at hand, you start to feel insecure about yourself and begin to worry that you won't be able to meet your responsibilities or take care of yourself. The symptoms, as well as the panic they create, can chip away at your self-esteem.

The lowered self-esteem, in turn, creates additional feelings of worthlessness, because in our society self-confidence is valued. It isn't "popular" to have low self-esteem, which puts pressure on the depressed person to hide all difficulties from others. This pretending creates further stress, and only increases the depressed person's fatigue and sense of isolation from others.

Clinical depression can also impair your reality testing. For example, you become hypersensitive to the reactions of others, and consequently, your views of how they feel about you may be distorted. Or you may feel utterly hopeless about situations in which there is, in fact, considerable hope.

Causes of Clinical Depression

Not only is clinical depression widespread, but numerous studies suggest that it is on the rise among all age groups, especially young adults. Experts attribute the rise in depression, in part, to increasingly difficult economic conditions. The increased depersonalization, and the breakdown of traditional support structures during the past two decades, are also contributing to the rise in depression. Depression rates are especially high among groups who are oppressed in some manner, for example, the poor, minority groups, women, and the handicapped. Depression is also prevalent among victims of abuse, violence, or other traumas.

As a trauma survivor, you are at risk for developing a clinical depression. Or you may already have a clinical depression you are unaware of. Some studies indicate that at least 50 percent of individuals with PTSD also suffer from depression. This depression is frequently, but not necessarily, a result of the trauma. But whether the depression predates the trauma or developed afterward, the effect is the same.

There are many different explanations for what causes clinical depression, as the following sections show. No one of these theories is 100 percent accurate in all cases, but they all have some validity in some instances. Clinical depression is caused by many factors, some of which are beyond individual control. Several of these causes can be directly related to trauma.

As you read these sections, keep in mind that causes for depression may vary over time—a given depressive episode may have an entirely different cause than the one preceding or following it. And the theory that explains one person's depression will not apply to another's. Think about which of these theories apply to you—which ones make sense in terms of feelings and experiences you have had.

Biological Theory. One way of looking at depression is as the result of disturbances in the neurotransmitter system, usually caused by the depressed person having been subject to severe stress for a prolonged period of time—as you read about above. Due to the stress or trauma, the per-

son's biochemistry becomes so strained that it cannot perform its functions as it did before the traumatic event. Breakdown of the neurotransmitter system can lead to low self-esteem, hopelessness, and other forms of negative thinking, and to difficulties with concentration, sleep, and decision making. It can also lead to irritability, anxiety, loss of the ability to experience pleasure, and hypersensitivity to the reactions of others—all of which are classic symptoms of depression.

Depression is also associated with physical illnesses, especially those of a chronic or severe nature, such as stroke, cancer, and heart disease. In addition, depression can result from severe injury and permanent disability, or from the multiple medications that might be needed due to these problems. Physical illness, disability, and medication tax the neurotransmitter system immensely. They also put a strain on other bodily functions.

Physical injury or illness also often creates other problems—financial, social, sexual, and emotional. These stresses further disturb biochemical balances and negatively affect the central nervous system.

If you were already ill or disabled when the traumatic event occurred, were suffering from malnutrition or sleep deprivation, or you were seriously injured during the trauma, you are at special risk for developing depression. The risk is especially high if a part of your body essential to your work or interests was affected. For example, a dancer who lost the use of her legs in an accident would lose not only her work but her means of creativity as well—a double blow that would almost certainly lead to depression.

Loss and Grief Theory. The dancer's depression over her loss in part fits Freud's view of depression. He believed that depression was the result of grief over the loss of a love object. However, the kind of grief he was referring to was grief that was mixed in with anger and hostility toward the loved one. Freud also felt that the loved one need not be dead. The death of the relationship with the loved one was sufficient to cause depression.

The concept of the loved one can be extended to include a cherished ideal, such as patriotism, certain spiritual values, or self-respect. Consequently, losing a long-held value or ideal or your dignity can also lead to depression. If your dignity or self-respect was assaulted not only by the trauma but subsequently by others' negative reactions to your feelings, you may be at a special risk for depression. Similarly, if your assumptions about the goodness and justice of the universe, or other values, were shattered by the trauma, your subsequent grieving may also develop into depression.

For example, in all of this century's wars, some soldiers have become disillusioned with the government or the military after observing hypocrisies, incompetence, and errors that resulted in needless deaths among their comrades. Many of these soldiers lost faith in military authority; some experienced a lessening of their patriotism as well. The resulting

feeling among these men was not only anger, but grief. They had lost the very ideals that caused them to join the military in the first place.

Behavioral Theory. The behavioral view of depression states that depression is the natural result of inadequate reinforcement, rewards, or recognition. Depression can easily develop among people who are inadequately rewarded or appreciated by others in their environment. Depression also results when people are unable to adequately appreciate, reward, or lovingly care for themselves.

Some popular self-help books on "how to love yourself" espouse or imply the idea that if you only can love and accept yourself, you don't need love and acceptance from others. In my experience, people need both. They need the recognition, love, and approval of at least a few other people as well as self-love and self-appreciation. Trauma survivors are sometimes deprived of both; they lack reinforcement from others and self-reinforcement.

Vietnam veterans and many service workers are prime examples of depression caused by lack of reinforcement. In general, until recently, the Vietnam veteran was far from appreciated by our society. Instead of a welcome-home parade such as greeted the Persian Gulf veterans, the Vietnam veteran was castigated and rejected for his sacrifices. Similarly, some rescue workers work long hours for relatively low pay and receive little recognition for their many heroic efforts on behalf of others. Such situations are the breeding grounds for depression.

Were you, as a trauma survivor, denigrated or not properly acknowledged for your efforts to survive or to help others survive? Did you have to withstand long-term traumatic conditions where you received few rewards for your efforts? If so, you may be at risk for depression.

Learned Helplessness Theory. Part of learned helplessness is a belief that you cannot exert control over the important events in your life. This feeling of helplessness or fatalism can lead to a clinical depression. Due to direct experience with powerlessness, and because of the biochemical changes that can occur during trauma, trauma survivors are especially susceptible to learned helplessness, and consequently, to depression.

Cognitive Theory. The cognitive view of depression is similar to the learned helplessness theory. However, cognitive theory states that depression is a problem of your thoughts and beliefs, rather than your feelings. Once you think or believe you are helpless or ineffectual, then such thinking controls your behavior. Negative thinking can result in negative events, which further reinforce your negative thinking and view of life.

Cognitive theory further states that depressed people misinterpret life events, distorting their view of the world, themselves, and the future in a hopeless direction. Such distortions and misinterpretations are often directly related to trauma, which in some cases teaches survivors that they are ineffectual, incompetent, or powerless (Burns 1980).

Anger-Turned-Inward Theory. People who do not know how to express their anger, are afraid to express their anger, or feel they do not have the right to express it, often turn that anger inward on themselves—resulting in depression. Turning their anger inward is frequently a cause of depression in trauma survivors who have experienced the following:

- Situations in which expressing anger could have caused their death (as is often the case with crime victims, refugees, and other captives) or could have led to physical abuse or other forms of punishment (as happens with abused women, children, and elderly persons). Even when the abuse or captivity is over, the "habit" of suppressing anger can be difficult to unlearn.
- Situations in which there is no clearly identifiable target for the anger: there is no one person or identifiable group to express anger toward (as is the case when a large bureaucracy or institution is nonresponsive to a survivor).

For example, toward whom do Holocaust survivors, survivors of torture by totalitarian regimes, or mistreated Vietnam and Korean war and World War II veterans, direct their rage? In these cases, as one survivor stated, "Everybody was responsible, but nobody was responsible."

Similarly, at whom or what can natural-catastrophe survivors vent their anger? Yelling at nature is less than satisfying. Blaming God or other supernatural forces poses a similar problem, complicated by the fact that those who direct their anger at a spiritual being often turn to that same being for protection, direction, and love. For those people it may be easier or safer to turn their anger inward than to risk a loss of faith by blaming their god.

Other Causes. Depression can also be caused by events unrelated to trauma. These include an acute brain syndrome, some other organic mental disorder, or a psychiatric problem such as schizophrenia or paranoia.

In some cases, depression is hereditary. If you have a family history of clinical depression or manic-depressive illness, it does not automatically mean that you will develop that problem. However, the strain of the trauma can bring forth these and other latent genetic-based psychiatric disorders. Therefore, if one or more of your family members has suffered from depression, watch yourself carefully for symptoms of depression.

One final note about depression. Some depressed people tend to get "depressed about depression." They interpret their symptoms of depression as signs of personal inadequacy and failure, and feel great shame and guilt over being depressed. Their feelings are reinforced by three factors: societal attitudes that blame people for their own pain, societal ignorance about depression, and cultural norms that view any person in emotional pain as "weak" or "deficient."

These are the same attitudes that oppress people with PTSD. (You'll learn more about this in Chapter 4, on victimization.) These unsympathetic attitudes do not reflect reality; they reflect people's ignorance about mental health matters and their fears about themselves.

Questionnaire: Clinical Depression

A severe clinical depression, in which you are barely able to talk, walk, or function, is easy to identify. However, it is more difficult to tell the difference between feelings of sadness, frustration, and discouragement, which are a normal part of life, and mild or moderate clinical depression. (You may want to review the description in the section "What Is Depression?") One difference is that in clinical depression, the despondency lasts a long time or is cyclical: the depressed feelings may go away and then return later.

Some depressions are reactive, in that they arise in response to a specific set of stressful events. Others are considered chronic, in that they have lasted for over two years without a period of two months or longer of relief. Still other depressions are considered constitutional, in that they are based in hereditary or other long-term factors.

The following questions will help you determine whether you have experienced what is called a major depressive episode. They are adapted from DSM-IV. Jot down your answers in the margin or in your journal.

1. Have you ever suffered from a depressed mood that lasted at least two weeks?
2. Have you ever, for at least two weeks, suffered from a loss of interest in or an inability to experience pleasure?

If you answered no to both of these questions, then it is highly unlikely that you suffer from depression. However, if you answered yes to at least one of these questions, continue on.

3. Over the same two-week period, did you feel depressed most of the day, nearly every day, as noticed by yourself or by others? (Feeling depressed can also be expressed as irritability.)
4. Over the same two weeks, did you or others notice that you lost most of your previous interest or pleasure in all or almost all of your daily activities, nearly every day?
5. Over the same two-week period, did you gain or lose more than 5 percent of your body weight (when not dieting) or did you notice a major increase or decrease in your appetite?
6. Over the same two-week period, did you have insomnia or hypersomnia (sleeping a lot) nearly every day?
7. Over the same two weeks, did you feel fatigued and without energy nearly every day?

8. Over the same two-week period, did you feel hyperactive and agitated or the opposite, underactive and sluggish, nearly every day, as observed by others, not just yourself? (This question refers to physical sensations, not to emotional restlessness or sluggishness.)
9. Over the same two-week period, did you feel worthless or extremely guilty about relatively inconsequential matters nearly every day? (This does not include feeling guilty about being physically ill.)
10. Over the same two weeks, did you have trouble concentrating or thinking or suffer from indecision nearly every day?
11. Over the same two-week period, did you have recurring thoughts of death or suicide (with or without a specific plan), or did you devise a specific plan for killing yourself or attempt suicide?

If you have answered yes to at least five of these symptoms and you also meet the following two criteria, you are considered to have had a major depressive episode. First, these symptoms must have caused important problems in vocational, social, personal, and other areas of functioning. Second, none of the following conditions applies:

- An organic brain problem or other medical problem caused or maintained the symptoms.
- What you experienced was a normal reaction to the death of a loved one.
- You experienced delusions or hallucinations.
- You suffer from schizophrenia, schizophreniform disorder, delusional disorder, or psychotic disorder.
- The symptoms are the result of substance abuse or some other form of substance or medication.

If you have met the criteria for a major depressive episode, do not despair. Like PTSD, depression is a highly treatable condition. Although our knowledge of it, like our knowledge of PTSD, is still in its infancy stages, the last ten years have seen a virtual explosion of interest in and research into depression. Improved treatment methods and many forms of effective medications exist that were not available 10 to 15 years ago.

The most important step you can take is to go for help. But don't go to just any counselor or psychiatrist; find one who specializes in depression. Depression, like PTSD, will not go away by itself. It is likely to worsen over time, and you can become so depressed that you will be unable, or unwilling, to receive the help you need and deserve.

Substance Abuse

If you have PTSD, you know what it means to be hyperalert. You can't sleep. You're constantly on guard, and you never know when those mem-

ories and nightmares will be coming back to haunt you. Equally horrible is that numb feeling. You're so bored, so shut down, that you feel more like a stone than a human being.

You might have found the feelings you experience in either the hyperalert or numbing stage of PTSD so unbearable that you have tried to drown them with alcohol, stuff them down with food, stifle them with drugs, or obliterate them with compulsive gambling, sexual activity, or spending. But no matter what you do, your symptoms slip back. The fact that you have compromised yourself to the point of addiction, only to find that addiction doesn't work to take away the pain, simply increases your desperation. This desperation, in turn, may serve to escalate your dependence on the mood-altering substance or compulsive activity.

The dependence began as a means of reducing anxiety, pain, and fear—at first it provided you with comfort and relief. However, you may have found by now that instead of having less anxiety, fear, and guilt as a result of your dependence, you have more. Your body, your mind, your relationships, your finances, and worst of all, your self-esteem have probably suffered because of it.

If you have turned to a mood-altering substance (such as alcohol, drugs, or food) or to a mood-altering activity (such as compulsive gambling or sexual activity) you are not unique among trauma survivors. Researchers have found high correlations between traumatization and substance abuse or other addictions and compulsions. The populations studied thus far include war veterans, natural-catastrophe survivors, fire and technological-disaster survivors, and abused persons, including men, women, and children.

Although much more research needs to be completed in this area, studies thus far have found rates such as the following:

- Approximately 50 to 60 percent of women and 20 percent of men in chemical dependency recovery programs report having been victims of childhood sexual abuse. Approximately 69 percent of women and 80 percent of men in such programs report being victims of childhood physical abuse (Kunzman 1990b, Bigham and Resick 1990).
- Anywhere from 40 to 60 percent of women in recovery for bulimia, anorexia, and compulsive overeating report victimization experiences (Slogan and Leichner 1986; Kunzman 1990a, b; Bigham and Resick 1990; Zweben 1987).
- The trauma of war has been implicated in the relatively high rates of substance abuse among combat veterans, with anywhere from 50 to 65 percent of PTSD-afflicted Vietnam combat veterans reporting alcohol or drug abuse. High rates of alcohol abuse have also been noted among World War II and Korean War com-

bat veterans (Jelinek and Williams 1984, Keane et al. 1983, Mat-sakis 1988, Lacoursiere et al. 1980).

- Severe trauma has also been documented among compulsive gamblers seeking help, among runaway and delinquent children and adolescents, and among both male and female prostitutes and actresses and models in pornographic films and magazines (Taber et al. 1987, Courtois 1988, Finkelhor 1979, Brown and Finkelhor 1986).
- Researchers have also noted increases in alcohol consumption among survivors of fires, floods, and other natural disasters.

PTSD-Related Causes of Addictions and Compulsions

Addictions and compulsions are complex phenomena. They have many possible causes, ranging from genetic and biochemical factors to social pressures to dysfunctional family backgrounds. However, in the case of trauma survivors, in many instances addictions and compulsions serve as forms of self-medication for the symptoms of PTSD. Ironically, they can serve as both stimulants for the numbing phase and sedatives for the hyperalert stage.

For example, a drink, a pill, a snack, a sexual encounter, or a shopping spree can induce some feeling during the numbing phase. Or that same drink, drug, or binge can produce a calming effect on the hyper-alert symptoms.

Drugs and food can also help fight insomnia, bad dreams, and intrusive thoughts. Alcohol helps induce sleep, for example, as well as suppressing REM sleep, during which many dreams and nightmares occur. Food and drugs can quell the anxiety, anger, and other strong feelings of the hyperalert stage. (However, these same substances can lower inhibitions against expressing frustration and rage in a verbally or physically abusive manner.)

Additions and compulsions can also be used by PTSD sufferers to handle the avoidance symptoms of PTSD, which include the tendency to isolate from others. "I couldn't handle the people at work (at parties, or at home) if I didn't drink (do drugs, binge)," some trauma survivors say. Their addiction or compulsion gives them the courage and confidence they need to feel comfortable with others; without it they might choose to be virtual hermits, limiting their contact to their immediate families and needed professionals.

A mood-altering substance or compulsive activity may partially or almost totally eliminate some of the undesirable symptoms of PTSD—for a while. But eventually it creates its own set of financial,

interpersonal, and social problems. And when these problems become overwhelming, they recreate the overwhelming nature of the original traumatic event.

Addictions, Compulsions, and Depression. PTSD can also lead to substance abuse via depression. If the PTSD has contributed to the development of a biochemical depression, substance abuse or compulsive activities can medicate not only the PTSD but also the depression.

Recent research has shown a substantial correlation between alcoholism and depression, as well as between eating disorders and depression. In some studies, for example, over 80 percent of alcoholic men have been shown to suffer from biochemical depression (Anixter 1990). Experts are not clear, however, about which comes first—the alcohol abuse or the depression. On the one hand, alcohol can serve to make tolerable some of the symptoms of depression. On the other hand, prolonged alcohol use, with its debilitating effects on the body and on the individual's ability to function, can actually create a biochemical depression.

Also, some of the initial symptoms from alcohol observed in detox treatment programs are similar to depressive symptoms. Thus the only way to tell if an alcohol-addicted person also suffers from depression is for him or her to be assessed for depression two or three weeks after withdrawal from alcohol. For the nondepressed individual, the symptoms of depression may largely disappear after two or three weeks of sobriety. However, for the dually affected individual, the depressive symptoms persist for at least two weeks following withdrawal and sobriety.

In the area of eating disorders, several studies have shown that over half of bulimic and anorectic women suffer from depression or come from families with histories of depression. As with alcoholism and depression, sometimes it is not clear which came first—the eating disorder or the depression. On the one hand, the eating disorder may have begun as a means of coping with the sad, lonely, angry, hopeless, and otherwise negative feelings associated with depression. On the other hand, prolonged, extreme dieting can create biochemical depression by stressing the neurotransmitters and by depriving the body of adequate nutrients. Such dieting is common among all who suffer from eating disorders, whether anorexia, bulimia, or compulsive overeating.

For people with eating disorders, the only way to determine whether they suffer from clinical depression is to wait until they have achieved some mastery over the disorder itself. Ideally, the overeating, self-starvation, or bingeing and purging will have stopped, or at least be at a manageable level, before it is determined whether the person also suffers from depression.

Further evidence of the relationship between depression and addiction lies in recent research that shows antidepressants to be exceptionally successful in controlling binge drinking, and binge eating (Wadden et al. 1986, Liberman et al. 1986, Wurtman and Wurtman 1989, Lee et al. 1985).

Assessing for Substance Abuse

If you have PTSD and you also use a substance or some particular activity to control your symptoms, you may fall into one of the following three categories:

No prior history of compulsion or substance abuse. You never abused alcohol, drugs, food, money, and so on prior to the traumatic event. However, you did so during the traumatic event or immediately afterwards. Or perhaps you only began abusing years afterwards, when for one reason or another the trauma emerged from suppression.

Prior history of moderate use. Before the traumatic event you were a moderate or occasional drinker, drug user, or overeater. Or every now and then you spent money or gambled excessively or had sex promiscuously. However, before the trauma, although you were out of control sometimes, these behaviors did not disrupt your life in any substantial manner. For example, perhaps you drank at parties and sometimes became intoxicated, but basically alcohol was not a problem. Or maybe you tended to overeat when disturbed. At times you binged, but food was not the center of your life and you never gained more than three or four pounds even when you did indulge.

But then you increased your usage of alcohol, drugs, food, or behavior to cope with the trauma. And somewhere you crossed over the line from casual substance abuser to a true addict. Now your addiction absorbs much of your time and attention. Whereas before you could stop drinking or taking drugs, now you cannot. Whereas before you were mildly concerned about your weight and eating, now you are obsessed with them. The questionnaires that appear below will help you determine whether you have crossed the line from occasional, recreational use to a genuine dependency or addiction.

History of substance abuse or addictive or compulsive behavior. If you were already abusing alcohol, drugs, or food or being compulsive about certain activities when the traumatic event occurred, the trauma may have functioned to increase your addictive or compulsive behavior. And because the abuse or compulsion predates the trauma, your healing process will probably include many more issues than just the traumatic event.

However, you cannot ignore the traumatic event. Just because you were addicted before does not mean your addiction today has little or nothing to do with the trauma. You will need to trace the effect of the trauma on your addiction the same as someone who was not addicted prior to the trauma.

The questionnaires that follow will help you determine whether you are an occasional substance user, a substance abuser, or an addict; whether you just occasionally overeat or you have a serious eating disorder; whether you are a recreational gambler or a pathological one; and whether your spending habits or sexual activity are areas of concern.

6. Do you experience withdrawal symptoms within a few days or even hours after you stop or reduce your intake?
7. Do you use your drug to relieve or avoid withdrawal symptoms?
8. Do you sincerely want to stop using drugs, but find your efforts to do so unsuccessful?
9. Do you spend an inordinate amount of time finding your drug of choice, consuming it, or recovering from using it?

Part II: Withdrawal Symptoms

Withdrawal symptoms vary from drug to drug. Withdrawal symptoms for various drugs (adapted from *DSM-IV*), including alcohol, opiates and opioids, amphetamines and similar drugs, cocaine, and the various types of sedatives, are listed below.

Alcohol withdrawal. After you have stopped drinking entirely or reduced your intake of alcohol for a few days, do you experience:

- A tremor of the hands or eyelids?
- Nausea or vomiting?
- Malaise or weakness?
- Physical hyperactivity (rapid heartbeat, sweating, elevated blood pressure)?
- Anxiety, depressed mood, or irritability?
- Transient hallucinations or illusions?
- Headache, insomnia, or grand mal seizures?

If you have experienced at least two of these symptoms and, in addition, these symptoms interfere substantially with your social relationships, employment, or other important areas of your life, then you suffer from alcohol withdrawal.

Opiate and opioid withdrawal. The opiates include opium, heroin, and morphine; opiates are those drugs that act like opiates. You must meet three of the following symptoms after several minutes or days of abstinence from or a reduction of opiate and opioid use or after taking a substance that counters the effects of an opiate or opioid in order to be considered in withdrawal.

- Depressed mood
- Nausea or vomiting
- Muscle aches
- Dilated pupils, goosebumps, or sweating
- Diarrhea

The questionnaires are based on definitions of dependency and addiction in *DSM-IV*. Although *DSM-IV* provides definitions of alcohol and drug dependency and abuse, eating disorders, and pathological gambling, it does not define compulsive spending or compulsive sexual activity.

Many people drink or overeat when they are distressed or to express joy. Similarly, many people gamble, buy things they can't afford, or over-indulge in sex for the same reasons. These relatively normal human excesses should not automatically be considered addictions or compulsions. However, such behaviors can become addictions or compulsions when they begin to become a means of coping with or escaping from certain emotions and life challenges. How much? and How often? are important questions to ask about your particular addiction or compulsion. Yet, for compulsive spending and compulsive sexual behavior, as well as for most other addictions and compulsions, the crucial issue is not how much or how often you practice them, but *why* you practice them and what effect they have on your life.

Questionnaire: Alcohol and Drug Use

Although a distinction is often made between alcohol and other drugs that affect the mind or behavior (psychoactive drugs), in *DSM-IV*, alcohol is considered a drug and is classified as such. Thus, in the following questions the word *drug* should be understood to mean alcohol as well. To determine whether you suffer from an alcohol or drug addiction, answer the following questions in your journal or in the margin.

Part I: Dependence or Addiction

1. Have you taken the drug in larger amounts or over a longer period of time than you intended?
2. Does the drug (either taking it or withdrawing from it) interfere with fulfilling your responsibilities at work, at school, or at home, or does it make life dangerous for you? For example, is your work attendance or driving record affected?
3. Have you given up or reduced your involvement in important social, work, or recreational activities due to your drug use?
4. Do you continue to use the drug even though you know it creates serious legal, medical, family, social, or psychological problems?
5. Have you found that today you need at least 50 percent more of the drug in order to obtain the same effects as when you began using it? Do you find yourself needing more and more of the drug to produce the same effect?

The following two items may not apply to marijuana, PCP, or hallucinogens (LSD, mescaline, DMT):

- Hyperactivity of the autonomic system (rapid heartbeat, sweating)
- Anxiety or irritability
- Marked shaking or tremor of the hands, tongue, and eyelids
- Marked insomnia
- Temporary visual, tactile, or auditory hallucinations
- Psychomotor agitation
- Grand mal seizures

If you have two or more of these symptoms and they have persisted for at least a month, you are considered to be addicted to or dependent on the drug. These symptoms must not be caused by some other physical or mental disorder and must cause disturbances in major areas of your life in order to be considered sedative, hypnotic, or anxiolytic withdrawal.

Part III: Alcohol and Drug Abuse

It may be that you are not yet addicted, but that you are on the road to addiction via substance abuse. The following questions will help you determine, if, in fact, you do abuse drugs.

Drug abuse is considered less serious than drug dependency or addiction, but it can lead to addiction. Answer the following questions, bearing in mind that the words *drug* and *alcohol* are used interchangeably:

1. Do you continue to use psychoactive drugs despite knowing that if you keep using you will create or worsen any existing social, occupational, psychological, or physical problems you have?
 2. Do you use psychoactive drugs in circumstances that endanger your physical health or your life? For example, do you drive intoxicated or high?
- If you answered yes to one of the above questions and the situation has existed for at least one month or has occurred repeatedly over a longer period of time, then you can be considered a substance abuser. See "Getting Help," at the end of this chapter.

Assessing for Eating Disorders

If food is your addiction, you might be like an alcoholic. Alcoholics often sneak drinks and have bottles hidden in the closet. Similarly, you may eat alone and have bags of cookies hidden in the closet. Drinking to ease the pain of trauma and its aftermath has caused some social drinkers to cross over the line into alcoholism. Similarly, you may have crossed the line from an occasional binge to compulsive overeating, and if you binge-and-purge, to the hell of bulimia.

- Yawning
- Fever
- Insomnia
- Rummy nose or eyes

These symptoms must cause significant difficulties in your life and must not be due to any other physical or mental disorders.

Amphetamine withdrawal. If, after several days or more of no longer taking or significantly reducing your intake of amphetamines or a similar drug, you feel depressed, irritable, or anxious, and in addition you experience two of the following symptoms for at least 24 hours, you can be considered to be suffering from amphetamine withdrawal:

- Psychomotor retardation (heavy feeling in the muscles, difficulty moving)
- Increased appetite
- Vivid, unpleasant dreams

The symptoms must not be caused by some other physical or mental disorder and must cause significant problems in the major areas of your life.

Cocaine withdrawal. Symptoms of cocaine withdrawal are similar to those of amphetamine withdrawal. If after several days or more of not using cocaine or reducing your use of it, you feel depressed, irritable, or anxious, and you experience two of the following symptoms, then you can consider yourself to be suffering from cocaine withdrawal:

- Fatigue
- Insomnia or hypersomnia (sleeping a lot)
- Psychomotor agitation (physical agitation and restlessness, for example, inability to sit still, twitching of one of the muscle groups, or a general inability to relax)

These symptoms must not be caused by some other physical or mental disorder.

Hypnotic or anxiolytic withdrawal. Hypnotic drugs, or sedatives, include various sleeping pills and tranquilizers, such as Nembutal, Seconal, Compazine, Noctec, Placidyl, Equanil, and Quaalude. The anxiolytic, or anxiety-reducing, drugs include librium and valium. If, after several weeks or more of not using or significantly reducing your usage of a sedative, hypnotic, or anxiolytic drug, you experience at least two of the following symptoms, you can be considered as having withdrawal symptoms from these drugs:

- Nausea or vomiting

But there are other forms of eating disorder as well. If you have an eating disorder, you likely fall into one of three categories:

- **Food-restricting (anorectic)**—You are obsessed with not eating and feel a revulsion toward food. You are also obsessed with your body image and weight.
- **Non-food-restricting (bulimic)**—You at times limit food intake, but other times you binge and then use purging, laxatives, or excessive exercise to maintain a standard weight. You may alternate between being obsessed with eating and being obsessed with not eating.
- **Compulsive overeating**—You binge, eat when you aren't hungry, or find it difficult to stop eating. You may hide or lie about your eating and feel worried or guilty about eating.

Record your answers to the following questions in your journal or in the margin.

Questionnaire: Anorexia Nervosa

According to *DSM-IV*, if you answer yes to *all* of the following questions, you are considered to be suffering from anorexia nervosa.

1. Is your body weight 15 percent below that expected for your age and height?
2. Are you intensely afraid of gaining weight or becoming fat, even though you are truly underweight?
3. Do you believe you are fat or overweight even though, in reality, you are not? Do parts of your body "feel fat" to you, even though the bathroom scales, other people, or your own eyes tell you that those parts are very thin?
4. If you are a woman, have you missed at least three menstrual periods in a row?

Questionnaire: Bulimia Nervosa

If you can answer yes to *all* of the following questions, you meet the *DSM-IV* criteria for bulimia nervosa:

1. Have you binged (eaten a large amount of food in a relatively short amount of time) at least twice a week for three months?
2. To compensate for the weight you think you might have gained due to your bingeing, have you made yourself vomit, used laxatives or diuretics, dieted or fasted, or exercised strenuously at least twice a week for three months?

3. When you binge or overeat, do you feel as if your eating is out of control—that you can't stop even if you want to?
4. Are you obsessed or overly concerned with your body shape and weight?
5. Do you binge, then either vomit, exercise excessively, or use laxatives, enemas, or diuretics during times when you are not anorectic?

Questionnaire: Other Eating Disorders

If you feel your eating is erratic or otherwise abnormal, but you do not meet the criteria for anorexia nervosa or bulimia nervosa, then you may fit into *DSM-IV* category called Eating Disorder, Not Otherwise Specified. Examples of these include the following:

- Making yourself vomit in order not to gain weight, even though you are not overweight and do not binge
- Having all the aspects of anorexia nervosa but still having your monthly menstrual flow
- Having all the symptoms of bulimia nervosa except that your binges occur less than twice a week or have persisted for less than three months
- Having all the aspects of anorexia nervosa except that your weight is within a normal range
- Reacting to eating small amounts of food by exercising, vomiting, taking laxatives, or otherwise trying to lose weight
- On a frequent basis, putting large amounts of food in your mouth, chewing it, then spitting it out

Questionnaire: Compulsive Overeating

Compulsive overeating is not classified as an eating disorder in *DSM-IV*, except perhaps under Eating Disorder, Not Otherwise Specified. However, since this addictive illness affects many trauma survivors, particularly women, a checklist for compulsive overeating is provided below. Compulsive overeating is an insidious addiction because overeating is not considered illegal or immoral, as are drug and alcohol addictions. Also, being overweight or overly interested in food is not outside the norm in our society.

1. Do you often feel depressed, guilty, angry, or inadequate?
2. Are you frequently on a rigid diet?
3. Do you regularly experience stomach aches or constipation?

4. Do you eat large quantities of food in a short period of time? Are these foods usually high-calorie, simple-carbohydrate foods that can be easily ingested (cookies, chips, candy)?
5. Do you eat in secret, hide food, or lie about your eating?
6. Have you ever stolen food or money to buy food so that you could start or continue a binge?
7. Do you feel guilt and remorse about your eating behavior?
8. Do you start eating even when you are not hungry?
9. Is it hard for you to stop eating even when you want to?
10. Do you eat to escape problems, to relax, or to have fun?
11. After finishing a meal, do you worry about making it to the next meal without getting hungry in between?
12. Have others expressed concern about your obsession with food?
13. Do you worry that your eating behavior is abnormal?
14. Do you fall asleep after eating?

If you have answered yes to five questions or more you may be a compulsive overeater (Matsakis 1990).

If you meet the criteria for anorexia, bulimia, compulsive overeating, or other form of eating disorder, it is relevant to your recovery from PTSD. See "Getting Help," at the end of this chapter.

Assessing for Compulsive Behavior

Like addiction or substance abuse, a compulsion is the repetition of an unwanted, irrational act. If you are addicted to an activity, on some level you probably know that your compulsion is hurting you more than it is helping you. However, such an admission alone, even with a sincere attempt to stop "cold turkey," will probably not prevent you from engaging again in compulsive gambling, overspending, compulsive sexual behavior, or other compulsive acts, because the compulsion serves a purpose—albeit poorly.

For example, the low self-esteem that can result from trauma or a non-supportive childhood can motivate compulsive spending. The spending may be a means of giving to yourself or of giving to others so they will love you. Similarly, compulsive sexual activity may be a means of feeling loved and accepted, since sexual intercourse is an act that generally means love and acceptance. And gambling, like overspending and compulsive sexual activity, can be used to numb feelings and awareness of painful issues, as well as to provide a temporary high. Other compulsions work in similar ways—gambling, sex, and spending are simply three of the most common compulsive behaviors.

Compulsive behavior also mimics power, control, and mastery—the very qualities that were lost in the trauma and subsequent life events. In the end, however, these feelings of love and control are too fleeting to be truly healing.

The questionnaires that follow will help you determine whether your behavior constitutes a compulsive activity. Record your answers in your journal or in the margin.

Questionnaire: Compulsive Gambling

In the DSM-IV, compulsive gambling is called pathological gambling; it is classified as an impulse-control disorder. You meet the criteria for classification as a pathological gambler if you can answer yes to at least five of the following questions:

1. Are you preoccupied with gambling or with obtaining money to gamble?
2. Do you need to increase the size or frequency of your bets to generate the amount of excitement you look forward to having?
3. Have you tried to control or limit your gambling but been unsuccessful?
4. Do you become anxious or irritable when you try to control or stop your gambling?
5. Is your gambling a way of reducing the stress you feel or alleviating negative mood states, such as feelings of depression or helplessness?
6. Do you return to gamble the day after you lose money?
7. Do you hide the extent of your gambling from others?
8. Have you broken the law to obtain the money to gamble?
9. Do you continue to gamble even though you know the gambling can jeopardize your job, relationships, or certain life opportunities?
10. Do you rely on others to help you with financial crises caused by your gambling? (Your gambling also must not be a result of a manic episode or a manic-depressive illness.)

Questionnaire: Other Compulsive Behaviors

There are no formal criteria for determining whether you are a compulsive spender or engage in sexual or other behaviors in a compulsive manner. However, with regards to compulsive spending or compulsive sexual activity, as well as to other addictions and compulsions, there are questions you can consider:

1. Can you stop? What happens when you do stop? Do you experience physical or psychological withdrawal symptoms? For example, do you

you experience physical symptoms such as "the shakes," drowsiness, confusion, or even panic symptoms such as gagging or dizziness? Or perhaps you experience psychological symptoms such as anxiety, sadness, depression, numbing, or irritability?

2. To what extent has your behavior affected your life? Has it adversely affected your work or school involvement, social life, sex life, family life, or physical health?

3. Are you concerned about your behavior? If so, why does it trouble you?

If you feel you have lost the power of choice over your behavior, it may well be a compulsion. Similarly, if your behavior is disrupting your life so much that you, or significant others, are concerned, you may want to discuss your concerns with a qualified therapist.

Getting Help

If you have met any of the criteria for depression, addiction, substance abuse, or compulsive behavior, you should seek help in dealing with the problem—few people are successful at doing so on their own. Furthermore, dealing just with the symptom (the depression, addiction, or compulsion) is inadequate. Only healing the pain behind the symptom has real power. Remember, aside from any hereditary or other biological factors, addictions and compulsions are basically means of coping with anger, loss, and other forms of emotional pain, and with any clinical depression that may have resulted from that pain. Until these feelings are dealt with, the behavior tends to persist.

Regardless of what program or therapist you choose to help you with your problem, be sure that the counselor has knowledge and expertise in that area. Appendix A gives general information on obtaining professional assistance. Appendix B lists organizations and written materials that offer help with specific PTSD-related problems.