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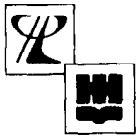
Handbook for the Treatment of the Seriously Mentally Ill



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and Mentally Ill National Institute of Mental Health. Washington, D.C. 1989 found the range to be between 28% and 37%, with one study identifying 20% as having a serious and persistent mental illness. But, Breakey, W.R., and Fischer, P.J. The Extent of Homelessness. Journal of Social Issues, 46, 4: 34–36, 1990, cite studies in New York, Baltimore, and LA that have a range of 50–70%

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PTSD as a Persistent Mental Illness

Matthew J. Friedman and Robert A. Rosenheck

Introduction and Problem

In the early 1970s, as the war in Vietnam was winding down, and the more than two million veterans who served there began to pick up the threads of civilian life, American psychiatry viewed stress reactions as circumscribed, time limited phenomena. According to the second edition of the APA's Diagnostic and Statistical Manual, when these disorders were prolonged, they were to be regarded as incidental manifestations of other underlying disorders. Reports began to emerge, however, of Vietnam veterans who experienced chronic and delayed post-traumatic stress reactions whose course could be both prolonged and quite severe.

In 1979, in response to these reports, the Veterans Administration established its first wave of Vet Centers. These were small community-based treatment settings designed to provide readjustment counseling for Vietnam veterans with war zone related post-

traumatic stress disorder (PTSD). As promoted by its original designers and envisioned by a sympathetic Congress, Vet Centers were established as a five year program. It would take three years, the reasoning went, to identify the veterans with PTSD nationwide. Another two years would then suffice to provide enough readjustment counseling for recovery and full reintegration into society. Now, in 1994, there are 203 Vet Centers in all 50 states. They are busier than ever. *This is because PTSD is often a persistent mental illness.*

Additional evidence on the persistence of PTSD comes from follow-up studies of individuals exposed to war-zone stress during World War II and the Korean Conflict (1). These include reports on WW II American veterans (2–4), American prisoners of war during the Korean Conflict (5), Dutch and Norwegian veterans and prisoners of war from WW II (6–7). These reports all demonstrate that severe and disabling PTSD symptoms can persist for up to forty years after exposure to the trauma of war.

In this chapter we will; 1) summarize the formal diagnostic criteria for PTSD; 2) review literature on circumstances in which its course may be prolonged; 3) present data on clinical characteristics and service utilization patterns of veterans suffering from PTSD who seek treatment from the VA; 4) comment on special considerations relevant to treating this population; and 5) comment on traumatic experiences of severely ill patients whose primary diagnosis is not PTSD. Our conclusion is that PTSD is not inherently a severe and prolonged illness but that in a subset of cases its course can be very much like those of other disorders discussed in this volume.

Historical Perspective

Diagnostic criteria for PTSD were first approved for inclusion in DSM-III (8) and revised in DSM-III-R. The core syndrome has remained in DSM-IV (9) with only minor modifications as shown in Table 1. Indications are that A very similar syndrome is classified in ICD-10. Diagnostic criteria for PTSD include a history of exposure to a "traumatic event" and symptoms from each of three symptom clusters: intrusive recollections, avoidant/numbing symp-

Table 1. Post-traumatic stress disorder (DSM-IV criteria).

A. Exposure to a traumatic event in which both of the following were present:
  (1) the person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others
  (2) the person's response involved intense fear, helplessness or horror

B. The traumatic event is persistently reexperienced in at least on of the following ways:
  (1) recurrent and intrusive distressing recollections of the event
  (2) recurrent distressing dreams of the event
  (3) sudden acting or feeling as if the traumatic events were recurring (includes a sense of reliving the experience, illusions, hallucinations and dissociative episodes, even those that occur upon awakening or when intoxicated)
  (4) intense psychological distress at exposure to events that symbolize or resemble an aspect of the traumatic event including anniversaries of the trauma
  (5) physiologic reactivity upon exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event

C. Persistence avoidance of stimuli associated with the trauma or numbing of general responsiveness (not present before the trauma), as indicated by three or more of the following:
  (1) efforts to avoid thoughts or feelings associated with the trauma
  (2) efforts to avoid activities or situations that arouse recollections of the trauma
  (3) inability to recall an important aspect of the trauma (psychogenic amnesia)
  (4) markedly diminished interest in significant activities
  (5) feeling of detachment or enstrangement from others
  (6) restricted range of affect, e.g. unable to have loving feelings
  (7) sense of a foreshortened future, e.g. does not expect to have a career, marriage, or children, or a long life

D. Persistent symptoms of increased arousal (not present before the trauma), as indicated by at least two of the following:
  (1) difficulty falling or staying asleep
  (2) irritability or outbursts of anger
  (3)difficulty concentrating
  (4) hypervigilance
  (5) exaggerated startle response

E. Duration of the disturbance (symptoms in B, C and D, of at least one month).

F. The disturbance causes clinically significant dostress or impairment in social, occupational, or other important areas of functioning.

toms and hyperarousal symptoms. A fifth criterion concerns duration of symptoms and a sixth concerns functional impairment.

Epidemiological studies on civilian residents of a large American city (10) and American veterans of the Vietnam War (11) show lifetime prevalence rates of approximately 9% and 30%, respectively. In other words, PTSD was not uncommon in the samples studied. Because of such findings, the latest revision of PTSD diagnostic criteria, the DSM-IV, no longer describes trauma as an "unusual" event.

The "A" or stressor criterion specifies that a person has been exposed to a catastrophic event such as war, torture, rape, a natural disaster, an industrial accident, and the like. During such exposure the person has been confronted with a situation that involves actual or threatened death or injury, or a threat to the physical integrity of himself, herself or others. In addition to exposure *per se*, many investigators now believe it is important to emphasize that during traumatic exposure, an individual's subjective response was marked by intense fear, helplessness or horror. Foa et al. (12) have recently proposed that to qualify as traumatic, a stressor must not only be perceived as a potential threat to survival but must also be experienced as uncontrollable or unpredictable. The prominence of an etiological factor (traumatic stress) in PTSD is unique within the DSM-IV and there is some controversy about where to draw the line between traumatic events and very painful stressors that constitute the common vicissitudes of life such as divorce, failure, rejection, serious illness, etc. Furthermore, the subjective appraisal of an historical event may determine whether an individual perceives a stressful episode as traumatic or merely difficult. After all, the subjective experience of trauma is a process by which information about an historical event is filtered through cognitive and emotional psychological processes. Because of individual differences in this appraisal process, different people appear to have different trauma thresholds, some more protected and some more vulnerable to developing clinical symptoms after exposure to extremely stressful situations. In this regard, there is some data suggesting that among people exposed to a traumatic stressor, those with a personal or family history of psychiatric illness are more likely to develop PTSD (10, 11).

The "B" or intrusive recollection criterion includes symptoms that are perhaps the most distinctive and readily identifiable symptoms of PTSD. For individuals with PTSD, the traumatic event remains, sometimes for decades or a lifetime, a dominating psychological experience that retains its power to evoke panic, terror, dread, grief, or despair as manifested in daytime fantasies, traumatic nightmares, and psychotic reenactments known as PTSD flashbacks. Furthermore, traumamimetic stimuli that trigger recollections of the original event have the power to evoke mental images, emotional responses, and psychological reactions associated with the trauma. Researchers, taking advantage of this phenomenon, can reproduce PTSD symptoms in the laboratory by exposing affected individuals to auditory or visual traumamimetic stimuli (13–15). Such symptoms can also be provoked pharmacologically by the adrenergic alpha-2 receptor antagonist, yohimbine, that acts directly upon the locus coeruleus in the brain (16).

The "C" or avoidant/numbing criterion consists of symptoms reflecting behavioral, cognitive, or emotional strategies by which PTSD patients attempt to reduce the likelihood that they will either expose themselves to traumamimetic stimuli, or if exposed, will minimize the intensity of their psychological response. Behavioral strategies include avoiding any situation in which they perceive a risk of confronting such stimuli. In its most extreme manifestation, avoidant behavior may superficially resemble agoraphobia because the person suffering from PTSD is afraid to leave the house for fear of confronting reminders of the traumatic event(s). Dissociation and psychogenic amnesia are included among avoidant/numbing symptoms by which individuals cut off the conscious experience of trauma-based memories and feelings. Finally, since individuals with PTSD cannot tolerate strong emotions, especially those associated with the traumatic experience, they separate the cognitive from the emotional aspects of psychological experience and perceive only the former. Robert Lifton, observing this phenomenon in Hiroshima atom bomb survivors and later in Vietnam combat veterans, labeled it "psychic numbing" (17, 18). It is an emotional anesthesia that makes it extremely difficult for people with PTSD to participate in meaningful interpersonal relationships.

Symptoms included in the "D" or hyperarousal criterion most closely resemble these seen in panic and generalized anxiety disorder. Whereas symptoms such as insomnia and irritability are generic anxiety symptoms, hypervigilance and startle are more unique. The hypervigilance in PTSD may sometimes become so intense

as to appear like frank paranoia. The startle response has a unique neurobiological substrate (19) and may actually be the most pathognomonic PTSD symptom (20).

The "E" or duration criterion specifies how long symptoms must persist in order to qualify for the (chronic or delayed) PTSD diagnosis. In DSM-III the mandatory duration was six months. In DSM-III-R the duration was shortened to one month. Although longitudinal studies by Rothbaum et al. (21), and McFarlane (22) have shown that acute recovery from trauma generally occurs within three months, the duration criterion in DSM-IV remaines one month. PTSD as formally defined does not, therefore, entail either prolonged distress or significant disability.

Theory: What Makes PTSD a Severe and Persistent Mental Illness?

Persistence of PTSD

Although in most cases recovery from trauma occurs in less than three months, there are well-recognized instances in which symptoms and sequelae of trauma can persist for decades or for a lifetime. In their 20 year follow-up of World War II veterans, Archibald and Tuddenham (2) found that veterans with PTSD (sic "war neurosis") not only continued to exhibit post-traumatic symptoms, but, in many cases, indicated that their clinical status had worsened over time. Other reports have documented persistence of PTSD symptoms among American combat veterans and prisoners of war (4, 5, 23), World War II European resistance fighters (6, 7), survivors of Khmer Rouge genocide (26, 27), survivors of the atomic bombings of Hiroshima and Nagasaki (17, 18), and survivors of natural disasters (28). In some cases, PTSD was found to be still present and virulent more than 40 years after exposure to the traumatic event (1, 6, 29, 30). The National Vietnams Veterans Readjustment Study (NVVRS) found that the lifetime prevalence rate of PTSD among male Vietnam veterans was 30.6% while the current prevalence rate, 15–20 years after

the cessation of hostilities, was 15.2% (11). In other words, half of all Vietnam veterans who exhibited the full PTSD syndrome at some point after war-zone exposure continued to meet diagnostic criteria twenty years after military service in Southeast Asia.

As indicated above, a significant proportion of Vietnam veterans who had once suffered from PTSD, no longer meet all the criteria for the disorder. These veterans were not, however, symptom free. Whereas some trauma survivors may become free of most or all PTSD symptoms exhibited previously, others may remain seriously affected. Indeed, the NVVRS found that 11.1% of male Vietnam war zone veterans currently suffer from "partial PTSD." These individuals lack one out of the necessary eight symptoms (usually from the C category) to meet full diagnostic criteria. In many cases, however, these remaining symptoms continue to seriously interfere with their capacity to function at home or at work. There is no DSM-IV diagnostic code by which to classify a chronic post-traumatic syndrome that falls short of PTSD diagnostic criteria. Unlike affective disorders in which the many diagnostic options (i.e., dysthymia, atypical depression, depression NOS) enable clinicians to characterize the full spectrum of mood disorders, PTSD is an all-or-none diagnosis. In other words there is no middle ground; people either have PTSD or they don't. It seems likely that the lack of a post-traumatic diagnosis comparable, for example, to dysthymia causes us to underestimate both the prevalence and chronicity of post-traumatic syndromes.

Relapse

As with other persistent disorders, people with PTSD exhibit relapses and remissions. Unlike schizophrenia and affective disorders, however, the triggers for relapses in PTSD are more readily identifiable. Such relapses often appear to be precipitated by further exposure to traumatic stimuli and situations. A recent example that illustrates this point was the response of Vietnam and older veterans to the Persian Gulf War. During the massive deployment of troops to the Persian Gulf, American print and broadcast media were constantly broadcasting information about the war. This was especially true of television which displayed the sounds and images of warfare night and day. There are anecdotal reports

that exposure to this barrage of combat stimuli precipitated a resurgence of war-zone related PTSD symptoms among American military veterans who had neither been symptomatic nor incapacitated shortly before the outbreak of hostilities in the Persian Gulf. This is attested by reports that there were significant increases in the number of veterans seeking treatment at VA Vet Centers across the Nation (31) and that the Persian Gulf War was unsettling to female Vietnam war-zone veterans (32). A similar, but less well documented example of the exacerbation of PTSD symptoms by trauma-related stimuli reported in the press, was the increase in traumatic memories and other PTSD symptoms among female rape/incest survivors during the televised sexual harassment charges asserted by Anita Hill against Clarence Thomas during his Supreme Court confirmation hearing before the Senate Judiciary Committee in 1991.

Aging, itself, may be a risk factor for relapse among older individuals with lifetime PTSD. Outliving a loved one or friend can sometimes evoke survival guilt which then triggers intense recollections of the traumatic circumstances under which personal losses occurred decades ago. The loss of control and unpredictable circumstances sometimes associated with serious medical illness can sometimes trigger traumatic memories of war, natural disaster, or political torture. Finally, the present authors share a clinical impression that retirement may, itself, place people with lifetime PTSD at risk for relapse. This is because the job-related obsessional defenses that sometimes flourish in the workplace especially among "workaholics," can no longer ward off symptomatology after retirement.

Relapse or exacerbation of PTSD symptoms may not always be as stimulus specific as the above examples suggest. Prior exposure to a traumatic event may increase the risk of developing PTSD following subsequent exposure to a different kind of traumatic experience. For example, sexual or physical child abuse victims may be more vulnerable to developing PTSD upon adult exposure to a war, natural disaster or industrial accident than adults who were not abused during childhood. Child abuse has been shown in two studies to be a significant antecedent of combat related PTSD (33, 34). Thus it appears that traumatic exposure is a profound and generalizable experience that increases subsequent risk for developing PTSD.

Table 2. Functional status of Vietnam combat veterans: Community vs clinical samples. Comparison of Vietnam Veterans seeking help from VA's PTSD Clinical Teams program and combat veterans in the general population (from the 1987 National Survey of Veterans) (in %).

	US	PCT
Marital status		
Married	80.8	45.0
Separated/divorced	13.6	43.6
Widowed	0.6	0.9
Never married	5.0	10.4
Employment		
Employed (FT or PT)	88.5	32.3
Retired/disabled	4.6	14.3
Unemployed/other	6.9	53.4
Income		
<$10,000	11.1	52.4
$10,000–20,000	13.8	25.7
$20,000	75.1	21.8

PCT = PTSD Clinical Teams, specialized outpatient programs for treating PTSD at VA Medical Center

Biological Bases for Persistence and Relapse in PTSD

Recent neurobiological research findings may provide a partial explanation of these observations by suggesting that PTSD may be associated with stable neurobiological alterations in both the central and autonomic nervous systems. Patients with combat-related PTSD have been shown to exhibit physiologic hyperarousal manifested by cardiovascular hyperactivity (13), increased sensitivity and augmentation of the acoustic-startle eyeblink reflex (20), a reducer pattern of auditory evoked cortical potentials (35), and sleep abnormalities (36). Stable neurobiological abnormalities have also been detected in the central noradrenergic, hypothalamic-pituitary-adrenocortical and endogenous opioid systems. Detailed review of these studies is beyond the scope of this article and is reviewed extensively elsewhere (37). A number of animal models have been invoked to account for the observed stability of PTSD symptoms over time (38–41). Many of these models postulate that exposure to trauma produces significant alteration and sensitization of crucial brain mechanisms that are not only responsible for

the persistence of PTSD symptoms but also for increased vulnerability to the impact of subsequent traumatic events.

Implications and Treatment

The Impact of PTSD on General Functioning

Epidemiological data from the National Vietnam Veterans Readjustment Study (NVVRS) shows that PTSD can have a major impact on general functioning, quality of life, marriage, social adjustment, and legal status. This national survey of Vietnam veterans assessed current and lifetime prevalence rates of PTSD, prevalence of other psychiatric disorders, prevalence of physical health problems and prevalence of other post-war adjustment problems (11). With regard to the last category, the NVVRS found that in comparison with Vietnam veterans without PTSD, men and women with PTSD were less likely to be married, either because of never having married or because of having been divorced. Men and women with PTSD were more likely to have had parenting or family adjustment problems, much more likely to report extreme unhappiness and much more likely to report extreme levels of social isolation. Thirty-five percent of men with PTSD had been homeless or vagrant. Forty percent of men with PTSD exhibited extremely high hostility scores, 25% had committed 13 or more acts of violence during the previous year, and 50% had been arrested or jailed more than once since age 18.

Severe and Persistent PTSD

Although, as noted previously, PTSD is not inherently a persistent mental disorder, there are patients suffering from PTSD who are severely and chronically incapacitated. As with schizophrenic and other patients described elsewhere in this book, these patients are *severely* ill. They often rely heavily on public mental health services (such as the VA). Their social functioning is markedly restricted. They have limited access to resources such as housing,

Table 3. Average annual bed days.

	1982 –1986	1987 –1991	1982 –1991	Admits 1982 –1991	Average Length of stay 1982 –1991	Using VA services in 1992
PTSD: N = 7,537						
Psychiatric	64.4	46.3	110.7	5.9	18.9	
Medical	12.2	17.1	29.3	4.0	7.4	
Total	76.5	63.4	139.9	9.8	14.2	
Users (% of N)	53%	42%	80%			80.8%
Alcohol: N = 18,901						
Psychiatric	62.0	47.1	109.1	4.5	24.3	
Medical	12.8	19.8	32.6	4.7	6.9	
Total	74.8	66.9	141.7	9.2	5.3	
Users (% of N)	70%	53%	88%			67.0%
Schizophrenia: N = 29,511						
Psychiatric	130.9	92.9	223.8	7.2	31.0	
Medical	13.6	25.9	39.5	3.7	10.6	
Total	144.5	118.8	263.3	10.9	24.1	
Users (% of N)	59%	50%	83%			80.3%

Average annual bed days of care used by diagnostic subgroups of the 1986 VA inpatient-outpatient psychiatric registry

income, and social supports necessary for successful community living. In the next two sections, we present data on severely and persistently ill PTSD patients receiving treatment from the Department of Veterans Affairs mental health facilities.

Clinical Characteristics and Treatment Needs

Data are available from a national evaluation of the VA's first 20 of 45 Congressionally funded specialized PTSD Clinical Teams (PCTs), implemented in 1989. As part of the national evaluation assessment, baseline data are available on 1,035 of these veterans and clinical process data, gathered 2 months after the initiation of treatment, on 470 (45%) of them.

In addition to their difficulties with PTSD symptoms and related problems, these veterans suffer from serious psychiatric comorbidities with 42% also diagnosed with affective disorder, 25% with current alcohol abuse and 21% with drug abuse. A total of 38% had attempted suicide in their lifetimes.

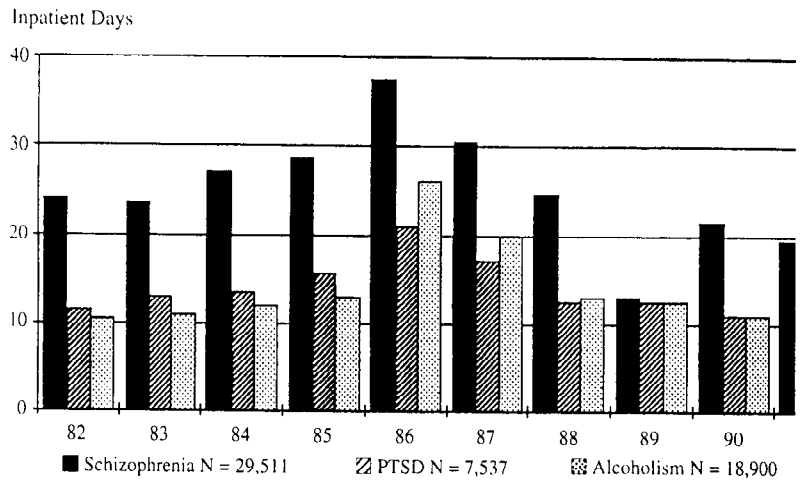

Figure 1. Inpatient hospital utilization: Mean annual days by diagnostic group.

Table 2 compares PCT Vietnam combat veterans with Vietnam combat veterans in the general population on three basic measures of social adjustment: marital status, current employment and income. As shown, PCT Vietnam combat veterans were half as likely to be married, three times as likely to be divorced, and twice as likely to have remained single. Unemployment rates were dramatically higher among PCT patients, partly because they were disabled, but mostly, we suspect, because their PTSD symptoms interfered with their capacity to sustain gainful employment. Annual income reflects this low level of employability, with five times as many PCT patients earning less than $10,000 per year than Vietnam combat veterans in the general population. The poorer adjustment shown by PCT patients indicates the substantial need in this population for rehabilitative as well as clinical services.

In addition to a formal clinical assessment, each veteran was asked to specify his or her current needs. Not surprisingly 94% expressed a need for help with symptoms of PTSD. Other prioritized needs, however, were for help with finances (56%), family and social relations (55%), employment (46%), and basic resources of food, shelter, and clothing (38%). Much lower on the list of priorities was the need for help with other psychiatric disorders (24%), alcohol abuse (18%), or drug abuse (10%).

Treatment

Two months after initiation of treatment, PCT clinicians filled out a structured questionnaire that addressed the primary focus of their clinical efforts for each veteran. Although in most cases (78%) clinicians reported that a major clinical emphasis was dealing therapeutically with PTSD symptoms, the most frequently cited focus of treatment was dealing with current social problems, it was mentioned in 88% of cases. Giving advice or direction was identified in 61% of cases and case management in 33%.

The impression that emerges from this descriptive portrait of the work of VA's PCT program is that there exists a severely disabled population of PTSD patients who depend on public sector mental health services. These patients have suffered from PTSD as well as other psychiatric and social-adjustment problems for many years. The treatment of this population requires attention to three main dimensions of clinical need: PTSD symptoms, comorbid health care conditions, and a multiplicity of social adjustment problems. One of the major lessons of clinical work with Vietnam veterans over the past decade is that attention must be paid to validating the ineffable historical truth of the traumatic event or events. What victims need first is confirmation or consensual validation of their painful memories. It is also clear that the articulation and confirmation of memory is only the beginning of treatment, and must be followed by systematic attention to clinical, illness-related needs as well as to a broad range of social and community adjustment needs, the treatment of which is described more fully in other chapters of this book.

Utilization of Inpatient Services

One of the central characteristics of the severely and persistently mentally ill is their extensive use of inpatient services. In this section we present descriptive data on the use of VA inpatient services by veterans diagnosed with PTSD and compare them with veterans in other diagnostic groups. Data from computerized VA inpatient discharge abstracts and from a major VA outpatient survey conducted in 1986 were combined to create a register of *all* VA patients who used specialized psychiatric services during a

four-week period in September of 1986, the last month of Federal Fiscal Year 1986 (FY 86) (42). A total of 107,000 patients (24% of whom were in the hospital for at least one day during this four week period) were included in this register: 7,537 (7%) were given a primary diagnosis of PTSD; 29,511 (28%) a diagnosis of schizophrenia; 18,900 (18%) a diagnosis of alcoholism; and 51,052 (47%) other diagnoses.

The use of inpatient services by these patients was tracked through VA's national Patient Treatment File, across the five years before the index period (FY 1982–1986), and through the five years after (FY 1987–1991) (Table 3 and Figure 1). Figure 1 shows average days of total (psychiatric and non-psychiatric) inpatient services per veteran. Summary inpatient utilization data are presented in Table 3 for the five years before the survey (1982–1986), for the five years after (1987–1991), and for the entire 10 year period. The last column indicates the percentage of patients who were still using VA health services or benefits in 1992 (6 years after the initiation of the registry).

Nationally, the highest users of VA inpatient services were patients with a diagnosis of schizophrenia, 83% of whom were hospitalized during the decade, with a maximum annual average of 35 days in the index year (FY 1986) and minimum annual average of 19 days in the last year (FY 1991). Overall utilization patterns for veterans with PTSD were generally below those for schizophrenia, but comparable to those for alcoholism. Of 7,537 patients with PTSD on the 1986 registry, 53% had been hospitalized at least once during the previous five years, and 42% were hospitalized during the subsequent five years. Altogether 80% were hospitalized at least once during the entire 10 year period, and 81% were still using VA inpatient or outpatient services six years later. In all three diagnostic categories the hospital days and proportion of veterans hospitalized increased during the five years before the index year and declined during the five years after. Although not as hospital dependent as schizophrenics, PTSD patients seen in the VA show high rates of inpatient psychiatric use and highly sustained use of VA services.

It is notable that only 7% of all VA psychiatric patients carry a diagnosis of PTSD. This modest percentage probably reflects, in part, some under-diagnosis of PTSD, especially in the substance abuse population. It also indicates that PTSD is less prevalent, even among veterans, than other psychiatric disorders. Other psychiatric disorders, especially schizophrenia, are also more likely to result in use of public sector services and to be more disabling. These data do show, however, that for some veterans PTSD is severe enough to result in repeated hospitalizations over many years and that it demands attention as a severe and persistent disorder.

PTSD, Trauma and Chronic Mental Illness

Chronic Mental Illness (CMI), a clinical designation with important policy, entitlement, and fiscal implications is usually applied to patients with schizophrenia, organic brain disorders, and severe affective illness. It has not generally been applied to patients with PTSD. As a result, clinicians and investigators in the CMI field rarely interact with colleagues in the PTSD field. There is growing evidence, however, that such a segregation of patients along these lines is not only unwarranted but counterproductive. We believe that a post-traumatic perspective is useful in the assessment and treatment of CMI patients for several reasons:

a) Patients with severe and incapacitating PTSD present many of the same case management problems as other CMI patients
b) CMI patients may be at greater risk for prior and/or current exposure to traumatic events
c) There may be clinically significant interrelationships between PTSD and psychotic disorders

Some patients with severe PTSD exhibit many characteristics of patients with other incapacitating persistent mental illnesses. Because of their inability to form and maintain intimate interpersonal relationships, they cannot participate in a marital or familial living situation. Because they cannot tolerate strong emotional expression, they often prefer to live alone to avoid social interactions and to live vocationally restricted lives. Because they are fearful of exposure to traumatic stimuli, they often regard their home as an island of safety in a dangerous world and (like paranoid and agoraphobic patients) many remain house-bound whenever possible. Such fear of the world manifests itself in hypervigilant behavior, mistrust, and projective defenses that occasionally are

manifested as frank paranoia. The alcoholism, depression, and drug abuse that are often associated with PTSD compound the core symptoms with other syndromes that exacerbate the chronicity of PTSD patients. Finally, treatment seeking patients with severe PTSD are often medicated, frequently with antidepressants and not infrequently with neuroleptics. Although pharmacotherapy may attenuate some PTSD symptoms, it may also produce sedation, impaired cognition, lower libido and other side effects that impair social and occupational functioning. In other words, severe PTSD patients are often reclusive, mistrustful, demoralized individuals who require careful case management and resocialization as do schizophrenic and other CMI patients.

There are numerous studies showing high rates of childhood sexual abuse in psychiatric outpatient and inpatient populations (43). In their study of homeless men and women, North and Smith (44) found that persons with a history of a psychiatric disorder were more likely than others to have been exposed to a traumatic event and that both traumatic exposure and the onset of PTSD preceded the onset of their homelessness.

Among chronically hospitalized patients, two studies suggest that there may be clinically significant differences between patients with a positive history for sexual abuse and those without. Beck and van der Kolk (45) found that twelve out of twenty-six chronically institutionalized actively psychotic female state hospital patients reported histories of childhood incest. These patients had a different symptom profile than the other patients marked by more social interest, more sexual delusions, more affective symptoms, more substance abuse, and more time spent in seclusion. Craine et al. (46) reported that 51% of a sample of 105 female state hospital patients reported a history of childhood or adolescent sexual abuse. (In most cases, hospital staff had never asked these patients about prior sexual abuse.) Previously abused patients were more likely than nonabused patients to have intrusive, avoidant/numbing and hyperarousal symptoms associated with the abuse. Indeed, 66% of abused patients met criteria for PTSD although *none had ever received that diagnosis*. Unlike non-abused patients, abused state hospital patients were more likely to exhibit compulsive sexual behavior, chemical dependency, sadomasochistic sexual fantasies, sexual identity issues, chronic fatigue, and loss of interest in sex. Other studies on patients in an intensive case management program (47) and in an acute psychiatric inpatient unit (48) also report high prevalence rates of previously undetected physical and sexual child abuse and raise the possibility that PTSD was also undetected.

Evidence that PTSD can result in severe and persistent mental illness and that severe and persistent mental illness can be associated with the presence of PTSD suggest that it is clinically important to obtain a trauma history from all severely and persistently mentally ill patients. Previous reports suggest that some CMI patients, currently labeled as either schizophrenic or psychotically depressed, may actually be misdiagnosed PTSD patients. On the other hand, the line between PTSD and psychotic syndromes may be blurry. Schneiderian first rank symptoms, traditionally thought to be a hallmark of schizophrenia, have been found to be more characteristic of patients with a history of childhood trauma and post-traumatic syndromes such as multiple personality disorder (MPD) and dissociative symptom clusters (49–50). In many cases, MPD patients had been previously diagnosed as schizophrenic. Furthermore, Ross and Joshi (50) raise the possibility that some of the positive symptoms of true schizophrenia may be due to childhood trauma rather than to the biological process of the schizophrenic illness.

McGorry and associates (51) suggest that an acute psychotic episode may be a traumatic event in its own right and argue that patients who subsequently exhibit reexperiencing, avoidant/ numbing, and hyperarousal symptoms related to the psychosis itself, suffer from secondary PTSD. In a series of 36 patients recovering from an acute psychotic episode, they found the prevalence of PTSD to be 46% at 4 months and 35% at 11 months after the episode. Other investigators have made similar observations (52–54).

To summarize, there are many reasons to expect that a significant percentage of CMI patients will not only have histories of previous traumatic exposure but may also meet diagnostic criteria for PTSD. Eliciting a trauma history and detecting PTSD may have useful and important implications for treatment and case management.

Conclusion

Exposure to traumatic stress can result in a variety of clinical outcomes. In the majority of cases, people will show no permanent psychological effects from such an experience. In other cases, people will develop PTSD. Among those who exhibit the full PTSD syndrome at some point after the trauma, some will experience remission or attenuation of symptoms while others will continue to suffer from PTSD indefinitely. Some people with PTSD are able to lead productive and fulfilling lives as do many individuals with other persistent illnesses such as diabetes, hypertension or affective disorder.

Other people with PTSD, however, suffer from a persistent incapacitating mental illness marked by severe and intolerable symptoms, marital, social, and vocational disability; and extensive use of psychiatric and community services. These people can often be found on the fringes of society in homeless shelters or enrolled in programs designed for patients with chronic mental illnesses such as schizophrenia. Indeed, we suggest that treatment and case management approaches that have been developed for patients with persistent mental illnesses should be applied to patients with severe and incapacitating PTSD. At the same time, the history of extreme traumatic experience must not be ignored in this population. Without a full understanding of how past traumas affect current clinical problems, functional improvement may not be attainable.

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