Approximately 80% of people with posttraumatic stress disorder (PTSD) have a co-occurring psychiatric disorder (lifetime rates), yet treatments to address such comorbid conditions have only recently been developed and studied. There are several ways to approach the treatment of comorbid disorders: integrated (treatment of comorbid disorders at the same time, by the same provider); sequential (treatment of one disorder, then the other); parallel (treatment of each disorder, but in separate treatments); and single diagnosis (treatment of just one disorder).

When considering comorbidity and its treatment, it is also helpful to explore the many possible relationships between the comorbid conditions (e.g., their development over time, course during treatment, and impact on each other), as well as how treatment may impact them, both together or differentially.

General Strength of the Evidence

Treatment models for PTSD comorbidity offer a wide range of features, including the types of trauma for which they are designed, the use of group versus individual modality, and the variety of techniques offered. Some models are designed from the start for comorbidity, whereas others are a combination of...
existing approaches already found effective for each separate disorder. Some studies address models that, designed for only one diagnosis, also showed impact on comorbid conditions.

Overall, this research area is at an early stage in both the psychosocial and pharmacotherapy areas. There are only a few Level A studies, and only one model is established as effective. Most studies address Axis I comorbid conditions, with only a few studies of comorbid Axis II disorders. Study methodologies generally have a variety of limitations, and some are reanalyses of existing datasets in which comorbidity was addressed post hoc and on only a subset of patients. No studies thus far have reported the full array of comorbid Axis I and II disorders. In terms of the Agency for Health Care Policy and Research (AHCPR) standards that guide this volume, in the area of comorbidity, a study may be one level for PTSD, yet another for the comorbid condition.

**Substance Use Disorder**

**Seeking Safety (Level A)**

Seeking Safety (SS) is an integrated, present-focused coping skills model for PTSD and substance use disorder (SUD). It offers 25 topics, each representing a safe coping skill (e.g., asking for help). The model is designed for high flexibility (e.g., length and pacing of treatment; group or individual format; men or women; all types of trauma and substances). It is the most researched model for any diagnosis co-occurring with PTSD, with 12 published studies that range from Levels A to C. Studies have addressed diverse samples, including clients in community treatment, adolescents, homeless clients, veterans, prisoners, and others. SS is the only co-occurring PTSD model that is established as effective at this point using criteria for empirically supported treatments. It has shown consistent positive outcomes on various measures, consistent superiority to treatment as usual (TAU), comparability to a “gold standard” treatment (relapse prevention), and high acceptability.

**Collaborative Care (Level B)**

Collaborative care (CC) is a multidisciplinary, integrated prevention model for PTSD and SUD for medically injured trauma survivors at risk for developing PTSD and alcohol use disorder. The model combines motivational interviewing, cognitive-behavioral therapy (CBT), psychopharmacology, and case management, with dose and treatments varying by clients’ presentation. The researchers compared CC and TAU; results after 1 year indicated that patients in CC were less likely to have PTSD and SUD than those in TAU. The study did not mention blind evaluators or adherence ratings, and it was not fully randomized, but this prevention model remains promising.
Concurrent Treatment of PTSD and Cocaine Dependence (Level C)

This model combines treatments that have efficacy for PTSD and SUD separately (relapse prevention, coping skills, in vivo and imaginal exposure). It is an integrated, 16-week individual treatment. A one-arm pilot study indicated that those who stayed in treatment had reductions in PTSD, depression, and SUD. The study offers impressive pilot evidence that some patients with PTSD and SUD can tolerate and benefit from PTSD exposure treatment; however, concerns center on treatment retention and paying patients to attend sessions.

Transcend (Level C)

Transcend is an integrated, 12-week partial hospitalization program of CBT, constructivist, psychodynamic, and 12-step models. An uncontrolled pilot study with 46 Vietnam veterans entering treatment evidenced significant reductions in PTSD symptoms; SUD was not assessed because all patients had to have 30 days of sobriety before starting. Transcend is currently the only model developed specifically for a partial hospitalization setting; it shows promise in treating veterans with PTSD and SUD.

Trauma Empowerment Recovery Model (Level C)

The trauma empowerment recovery model (TREM), a group model originally designed for women abuse survivors with severe mental disorders, has been adopted more broadly. The model includes psychoeducation, cognitive restructuring, survivor empowerment, skills building, and peer support. In a controlled study, TREM was modified to a 24-session version (from 33 sessions) and followed an initial orientation with a trauma workbook. The study evaluated women in residential substance abuse treatment, comparing TREM plus workbook to TAU. The former had better outcomes on trauma-related symptoms. Both improved in substance use symptoms, with no difference between them.

Substance Dependence–PTSD Therapy (Level C)

Substance dependence–PTSD therapy (SDPT) is an integrated, 40-session individual therapy that addresses PTSD and SUD in a phase-based approach using existing models for each disorder (e.g., coping skills training and in vivo exposure). A study compared SDPT to 12-step facilitation (TSF) in a sample with at least current partial PTSD and lifetime SUD. Results indicated that among participants who attended at least three sessions, more sessions were attended in SDPT than in TSF. No other differences were found between the treatment conditions; thus, the researchers combined the data. At face
value, the model has potential. However, it is difficult to draw conclusions because SDPT did not outperform TSF relative to PTSD or SUD, nor are results reported separately for SDPT.

**Acceptance and Commitment Therapy (Level F)**

In a case study using acceptance and commitment therapy (ACT) for 96 sessions of individual therapy, the patient was stated to have PTSD and SUD, but without standardized assessment. She was assessed every 3 months on various measures, with improvement mostly at 9 months and thereafter. It is challenging to know what to make of this study given its methodology. Nonetheless, ACT is widely known, and it would be helpful to understand whether it has potential for PTSD and SUD.

**Generalized Anxiety Disorder/Major Depressive Disorder**

**Cognitive-Behavioral Therapy for PTSD (Level A)**

CBT has been evaluated among motor vehicle accident (MVA) survivors with full or subthreshold PTSD and comorbid disorders. A randomized controlled trial (RCT) compared CBT to supportive psychotherapy (SP) and wait list, and examined generalized anxiety disorder (GAD) and major depressive disorder (MDD) in addition to PTSD. However, the model was not designed for GAD or MDD. CBT was found superior to SP, which was superior to the wait list on numerous variables. CBT also showed greater reduction in MDD and GAD symptoms than the other conditions. This study is Level A for the comparison of CBT versus wait-list control only; SP does not qualify as Level A due to therapist assignment (CBT clinicians conducted it) and other concerns. Other issues include varying dose of treatment (8–12 sessions) and the fact that comorbid conditions were not present in all patients. Given the frequency of MVAs, this model addresses an important area.

**Panic**

**Multiple-Channel Exposure Therapy (Level B)**

Multiple-channel exposure therapy (M-CET) is a manualized, 12-week group model integrating cognitive processing therapy for PTSD (CPT) and exposure for panic. When M-CET was compared to a minimal attention control condition, the M-CET group had greater reductions in PTSD and panic symptoms, and both improved in depression. However, the study is only on a completer sample and is not fully randomized (i.e., some participants were in both conditions). More research is needed on this promising model.
Sensation Reprocessing Therapy (Level B)

Sensation reprocessing therapy (SRT), an integrated treatment for Southeast Asians, combines CPT for PTSD, exposure for panic, mindfulness, and cultural adaptation. The pilot studies compared SRT to a wait-list control in a Vietnamese population and in a Cambodian population and found that the SRT condition produced greater reductions in PTSD and other anxiety symptoms. However, only one clinician conducted all sessions; there was lack of full randomization (some patients were in both conditions), lack of identical timing of assessments, and no mention of adherence. SRT is especially noteworthy for its cultural sensitivity.

CBT for Panic Disorder plus Implosive Therapy (Level D)

A case study using a sequential approach examined nine sessions of CBT for panic disorder with agoraphobia followed by nine sessions of implosive therapy for PTSD. Results indicate diagnosis-specific impact: reduction of panic but not PTSD symptoms after the panic treatment phase, and reduction of symptoms of both disorders after the panic plus PTSD phases.

CBT/Exposure (Level D)

In a post hoc analysis on two group CBTs for panic disorder (both with an exposure component), the two treatments were combined to evaluate PTSD outcomes. Results indicated reduction in panic symptoms, and for those with PTSD, a reduction in PTSD symptoms. However, only a few patients had PTSD, and the two treatments were combined.

Obsessive–Compulsive Disorder

Obsessive–Compulsive Disorder Inpatient Treatment (Level C)

A naturalistic study and several case studies on a residential obsessive–compulsive disorder (OCD) treatment program examined a behavioral program (exposure and response prevention), with no modification for PTSD. Patients with PTSD showed worse outcomes on OCD and depression symptoms, and some had an increase in PTSD symptoms. Researchers concluded that this OCD treatment may be iatrogenic for comorbid PTSD.

Borderline Personality Disorder

Prolonged Exposure/Stress Inoculation Training (Level C)

In a reanalysis of data from a PTSD treatment trial to evaluate outcomes for borderline personality characteristics (BPC), three treatments developed for PTSD only, not BPC, were compared: prolonged exposure (PE), stress inocu-
lation training (SIT), PE plus SIT, and wait list. Data from all conditions were collapsed due to the small BPC sample. All patients improved by end of treatment on various measures including PTSD. Although groups did not differ with regard to loss of diagnosis following treatment, those with BPC were less likely to achieve good end-state functioning.

**Psychodynamic Imaginative Trauma Therapy and EMDR (Level C)**

A naturalistic study of psychodynamic imaginative trauma therapy (PITT) and eye movement desensitization and reprocessing (EMDR) on patients with “complex PTSD” and multiple comorbidities was examined. The treatment was designed for PTSD only. All patients received 2 months of inpatient care, were discharged, then, 8 months later, a subset of patients reentered the hospital and received trauma treatment (PITT, a psychodynamic model, plus EMDR). Those who completed the trauma-focused component improved more than those who did not.

**Psychotic Disorders**

**Trauma Recovery Group (Level C)**

Trauma recovery group is a CBT program for PTSD and serious mental illness (SMI), with components that include crisis planning, breathing retraining, psychoeducation, coping with symptoms, and personal recovery. An individual version is 12–16 sessions, whereas the group treatment is 21 sessions. In uncontrolled pilot studies, the individual model evidenced high retention, and improved PTSD and general psychiatric symptoms. The group model had lower retention, but completers showed improvement in PTSD and other symptoms. SMI is an important comorbidity, and future research is warranted.

**Psychopharmacology**

Despite the high comorbidity of PTSD with other disorders, there have been few pharmacotherapy studies in this complicated patient population. Existing studies are promising, with most indicating that patients with PTSD and comorbidity respond as well to standard pharmacotherapies as those without comorbidity. Several studies provide useful data concerning adjunctive pharmacotherapies in specific comorbid conditions.

Level A studies have been conducted on sertraline and risperidone. Level B studies have been conducted on disulfiram, naltrexone, and their combination, and antidepressant (paroxetine or bupropion) versus CBT versus community mental health referral.

Overall results suggesting positive findings. There is also initial evidence for possible subtypes based on subjects with PTSD or comorbid conditions.
who respond differentially (e.g., to sertraline); possible subtypes based on 
chronicity of PTSD who respond differentially (e.g., to risperidone); a finding 
for better outcomes with medications provided separately than combined (for 
disulfiram and naltrexone); a finding of improved outcomes on alcohol use 
among those with PTSD (for disulfiram or naltrexone compared to placebo); 
and a finding of worse outcomes for patients with MDD and PTSD compared 
to MDD alone using antidepressant medication (paroxetine or bupropion).

Summary and Recommendations

Virtually all of the literature on treatment for PTSD and comorbid conditions 
has arisen in the past few years. Given the high rates of PTSD comorbidity 
and the often vulnerable nature of such populations, it is encouraging to see 
such a burst of energy. In addition to the disorders stated earlier, a number of 
other disorders frequently co-occur with PTSD. As yet, there are insufficient 
clinical trials addressing these disorders in the context of PTSD, for example, 
dissociative disorders and Axis II disorders, such as avoidant or antisocial 
personality disorders.

Overall, only four treatments have a Level A study: SS, CBT for PTSD in 
MVA survivors, and the medications sertraline and risperidone. Most treat-
ments, both psychosocial and pharmacological, have a single study, with a 
few having two. SS is established as effective, with 12 published studies. Study 
methodologies generally have a variety of limitations, and some are reanaly-
ses of existing datasets in which comorbidity was addressed post hoc and on 
only a subset of patients. Most studies address Axis I comorbid conditions, 
with only a few studies of comorbid Axis II disorders. Future studies will ben-
efit from more scientific rigor, expanded assessment, and exploration of the 
optimal number of sessions and treatment components. It is hoped that the 
next decade will see more RCTs, more empirical work on dissemination and 
training, and greater understanding of the comorbidities themselves (e.g., 
rates, causal relationships, and prognosis). The study of PTSD comorbidity 
is a relatively new area of research in which there is room for a great deal of 
growth.

At this point, we present a few summary points:

1. Addressing comorbid conditions in treatment is recommended.
2. There are various ways to address comorbidity, but integrated treat-
ment is generally the most highly recommended; research is needed 
to address whether it actually outperforms other approaches.
3. Single-diagnosis treatments (the majority of PTSD treatments thus 
far) may have impact on comorbid conditions even if not originally 
designed for them.
4. Patients with PTSD and comorbid conditions can benefit from psy-
chosocial treatments, as well as from pharmacotherapy.
5. Most studies thus far are uncontrolled pilot studies; only four Level A studies were found (for SS, CBT for MVA survivors, sertraline, and risperidone); only SS meets criteria for efficacy.
6. Axis II comorbid conditions have been especially underaddressed.
7. Almost all studies address CBT-based models rather than other theoretical orientations.
8. Only one model was suggested to have negative outcomes (behavioral treatment of OCD).
9. More research is needed on these disorders and other, commonly occurring disorders not named, especially studies with strong methodology (Level A).

Suggested Readings

