ORIGINAL ARTICLE

Underwriting Considerations for Dissociative Disorders

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Objective.—Dissociative identity disorder (DID) has been diagnosed more frequently and is under greater scrutiny. Because of the number of comorbid conditions, the underwriting risks must be evaluated to determine morbidity and mortality implications.

Background.—The number of diagnosed cases of DID has increased in recent years. The diagnosis often coexists with other diagnoses such as bipolar disorder, major depression, post-traumatic stress disorder, anxiety disorder, somatization, personality disorders, and psychotic disorder. A high incidence of substance abuse and eating disorders is found in the population diagnosed with DID.

Methods and Results.—A query of disability claim experience with DID indicated that these claims tended to reach the maximum duration for mental/nervous benefits despite case management and return to work activities.

Conclusions.—The DID psychiatric population is a complex group with mental disorders that place them in a group likely to use maximum disability benefits and who would pose increased life underwriting risk. In addition, the literature indicates a high excess risk for early mortality and excess health care expenses compared to the normal population.

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A psychiatric diagnosis that has been under serious scrutiny for more than 10 years is dissociative identity disorder (DID), formerly known as multiple personality disorder (MPD) until the publication of the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV)* in 1994.¹ The name was changed to address both the concerns about the misconceptions regarding the nature of the disorder and the clinical transition from a rare to a more commonplace diagnosis. Dissociation has been described in psychiatric literature as early as 1815, but only 200 cases were estimated prior to 1980.²

Most recent estimates suggest that more than 6000 diagnosed cases of DID or dissociative disorder, not otherwise specified (DDNOS, a dissociative disorder with many similar features but lacking in key elements that constitute a diagnosis of DID) have been identified since 1980.³

Clinical studies have identified that 12–30% of psychiatric inpatients have a dissociative disorder and approximately 3–5% would be diagnosed with DID.^{2,4–7} Using semistructured interviews of randomly selected psychiatric inpatients, Rifkin et al⁸ found an incidence rate of 1% for DID. In groups of non-

clinical subjects, prevalence rates of 3.5–11% were found for dissociative disorders and 0.5–1.3% were diagnosed with DID.^{7,9} Given the increased assignment of this diagnosis, there is a real need to determine associated morbidity and mortality risks.

The essential features of the dissociative disorders are a disruption in the usually integrated functions of consciousness, memory, identity, or perception of the environment. The disturbance may be sudden, gradual, transient, or chronic. DID is characterized by the presence of two or more distinct identities, or personality states, that recurrently take control over an individual's behavior accompanied by an inability to recall important personal information that is too extensive to be explained by ordinary forgetfulness. This disturbance cannot be attributed to the direct physiological effects of a substance or general medical condition. Amnesia or memory gaps are frequent in the personal history. Transitions between identities are often triggered by psychosocial stress.1

Controversy exists concerning the differential diagnosis, which may include many other mental disorders such as bipolar disorder with rapid cycling, anxiety disorders, somatization disorders, personality disorders, and psychotic disorders.1 Self mutilation, aggressiveness, and suicidal and conversion symptoms such as pseudoseizures may occur. The condition appears to have a fluctuating clinical course that is chronic and recurring. People with DID may also meet the psychiatric criteria for mood, substance, sexual, eating, and sleep disorders.1 Some meet the criteria for borderline personality disorder as well. Thus, there is a strong association of multiple comorbid psychiatric disorders with DID. The diagnosis may be difficult to make and confused with a number of other betterknown psychiatric disorders. Estimates suggest that persons will be treated in the mental health system for up to 7 years before an appropriate diagnosis is made. Ross et al10 found that prior to the MPD (or DID) diagnosis, patients averaged 2.74 other diagnoses, including 64% affective disorder, 57% personality disorder, 44% anxiety disorder, 40% schizophrenia, and 31% substance abuse.

All studies of DID have found evidence of comorbidity with other mental and physical disorders. It was found that the average number of lifetime comorbid Axis I disorders was 7.3 (SD = 2.5) while the average number of Axis II diagnoses was 3.6 (SD = 2.5). This did not include DID, post-traumatic stress disorder (PTSD), sleep disorders, or psychosexual disorders. It was concluded the average DID patient meets the lifetime criteria for about 15 different DSM-IV disorders.11 Associated features include post-traumatic symptoms such as nightmares, flashbacks, and startle reactions; thus, an additional diagnosis of posttraumatic stress disorder is warranted.1 Herman and van der Kolk et al^{12,13} suggest that DID should be diagnosed as complicated PTSD, as the diagnosis is clearly related to early trauma. The Sidran Foundation¹⁴ (a DID advocacy group) estimates that 80-100% of people with DID also have secondary PTSD. Saxe et al² found that all of the psychiatric inpatients with DID had comorbidity with another psychiatric diagnosis. Most met the criteria for PTSD and major depression, either currently or during their lifetime. Approximately two thirds met the criteria for borderline personality disorder and substance abuse.

Ross interpreted these findings to suggest that DID is part of a normal human response to severe chronic childhood trauma. He further opined that trauma is a major etiologic factor in all psychiatric disorders.¹¹ Pribor and Dinwiddie found that abused subjects show more PTSD, panic disorder, social and simple phobia, agoraphobia, major depression, and substance abuse when compared to general population and nonabused psychiatric subjects.¹⁵ A review of the literature found that DID was notable for auditory hallucinations (positive Schneiderian symptoms), depression and suicidality, phobic anxiety, somatization, substance abuse, and borderline features.¹⁶ In a study of 2-year outcomes for inpatients, Ellason and Ross¹⁷ found that people with DID endorse a mean of 7.3 Axis I diagnoses at the onset of diagnosis. Ross and Norton¹⁸ suggest that DID might be a superordinate diagnosis in that other Axis I diagnoses tend to remit with successful treatment and integration. Ross and Dua¹⁹ determined the lifetime health costs of treatment for 15 people with DID. The total cost spent by the Canadian health system was \$4.1 million. The average time in the health care system before diagnosis was 98 months. The average time in care after diagnosis was 32 months.

DEPRESSION AND ANXIETY

The single most common presenting symptom in MPD patients is depression. A National Institute of Mental Health (NIMH) survey found depression in 88% of the cases, and about 75% of patients reported mood swings.²⁰ Symptoms suggestive of phobic, anxiety, or panic disorder are common in dissociative patients. These often accompany triggers, or reminders of traumatic experiences, and lead to much avoidance behavior. Ellason et al¹⁶ found that depression was the most common comorbid disorder with DID.

In a study of subjects presenting for treatment for obsessive-compulsive disorder, 20% presented with significant dissociative symptoms. These persons were more likely to have personality disorders and had a greater number and severity of obsessive-compulsive symptoms.²¹ Goff et al²¹ did not find an overlap with a diagnosis of DID, but 3 of the subjects met the criteria for DDNOS. DID has also been associated with phobic anxiety.²²

TRAUMA AND PTSD

Many persons have reported severe physical and sexual abuse, particularly in child-hood. The NIMH survey indicated that 97% of all MPD patients reported childhood trauma, with 68% reporting incest.²³ Combinations of sexual abuse and physical abuse were reported in two thirds of those surveyed. Ross et al⁶ found a 95% incidence of physical and/or sexual abuse.

In a study of 51 sexual abuse survivors, 94% had depression, 65% had substance abuse history, and 55% had DID diagnosed.²⁴ Von Braunsberg⁷ reviewed the literature and concluded that having a dissociative experience at the moment of trauma is the most significant long-term predictor for development of PTSD. Increased dissociative experiences were found in 100% of people with trauma history. McCauley et al²⁵ found that subjects abused in childhood were four times as likely to attempt suicide, three times more likely to be hospitalized, and twice as likely to have suicidal thoughts as nonabused controls.

SUBSTANCE ABUSE AND EATING DISORDERS

Substance abuse is another frequent problem and polysubstance abuse was noted in one third of the NIMH study group. Analgesic overuse often accompanies the treatment for headaches, which are common to this group. In one study group in Canada, Ross and Norton found 43% of a group of 100 subjects with substance abuse met criteria for a dissociative disorder, and of those, 14 met the criteria for DID. In an American group of subjects, Ross¹¹ found 60% of substance abusers met criteria for dissociative disorders, including 18% with DID. Felker et al26 determined that substance abuse alone or in conjunction with other psychiatric disorders has repeatedly led to increased mortality rates. Dunn et al²⁷ provided the opinion that persons with substance abuse complaints should be screened for dissociative disorders based on the relationship of the two disorders. In a group of 265 male chemically dependent military veterans, 41.5% had a high level of reported dissociative experiences. The literature has produced documentation of 30-70% incidence of childhood sexual abuse in patients with eating disorders. 28,29 Coons et al30 found a 10% incidence of previously diagnosed eating disorders in a series of 50 patients with MPD. Anecdotally, most people with MPD describe some sort of disrupted eating patterns.29

HALLUCINATIONS AND PSYCHOTIC DISORDERS

The majority of the patients report auditory and/or visual hallucinations. Ellason and Ross¹⁷ noted that 24–50% of patients with dissociative disorder have been previously diagnosed and treated for schizophrenia. The hallucinations primarily consisted of commentary from internal parts sometimes supportive but also abusive in tone. The voices are described as loud thoughts differentiated from the voices typical in psychotic disorders, which are more often perceived as outside the person. Ross et al⁶ found that patients with DID report a greater number of Schneiderian first-rank symptoms than do schizophrenics. Schneiderian first-rank symptoms are the positive symptoms thought to identify schizophrenia, such as auditory hallucinations (hearing voices in your head), intrusive thoughts, thought withdrawal, thought insertions, thought broadcasting, and delusional thinking. One study of schizophrenic patients found that this group reported 1.3 Schneiderian symptoms while patients with DID report an average of 4.9 Schneiderian symptoms.¹⁷ This suggests that Schneiderian symptoms are more indicative of DID than schizophrenia. In these patients, when the personality fragments, or alters, integrate, these symptoms disappear. Fink and Golinkoff³¹ found that persons with DID had a greater number of somatic symptoms, more prevalent major depression, more dissociative symptoms, and a higher level of childhood trauma than patients diagnosed with schizophrenia. Dissociative patients were found to have greater levels of anxiety and depression than persons with schizophrenia.17

SUICIDE

One of the most common presenting features of DID consists of suicidal ideation with additional suicide attempts. Kung et al³² found that social isolation, lack of social integration, depression, addiction, somatic illness, and stressful life events all have been identified as causes or risk factors for suicide.

Suicide is often underreported for many reasons, sometimes because of lack of suicide identification in statistics regarding cause of death. Ross and Norton¹⁸ identified that 72% of subjects in their study group of 100 persons with DID diagnoses had attempted suicide. The group that had attempted suicide had spent more time in the mental health system, had more reports of physical abuse and rape, had more psychiatric diagnoses, had more inpatient treatment, and more Schneiderian symptoms. The group that completed suicide (suicide resulting in death) had more time in jail and may have had more antisocial personality features but were not different from the parasuicidal group in other dimensions.

Putnam et al23 noted suicidality as a presenting symptom in nearly 70% of 100 cases reported. Ross and Norton¹⁸ reported 236 cases of dissociative identity disorder, in which 72% had attempted suicide. Of this group, 2% actually were successful in killing themselves. The methods of the suicide attempt included drug overdose (68%), burns or other injury (57%), and wrist slashing (49%). Anderson et al studied 51 sexual abuse survivors to address dissociative disorders. Of this group, 49% had attempted suicide at least once by drug overdose, cutting with a knife or other weapon, with a gun, burning, and hanging.24 Kaplan et al found that increased suicide ideation was related to both previous and current abuse. This group noted significantly higher levels of dissociation, depression, and somatization.33

PERSONALITY DISORDERS

Self mutilation occurs in at least a third of patients and is differentiated from suicidal behavior.²⁰ This behavior is common in people diagnosed with borderline personality disorder and serves in a soothing capacity, possibly relating to an emotional release or release of endorphins as a reaction to the physical act. Ross¹¹ indicated a belief that both DID and borderline personality disorder exist as comorbid condition. Studies have in-

dicated that more than 50% of persons with DID meet criteria for borderline personality disorder.¹¹ Ellason et al found that borderline, avoidant, and self-defeating personality disorders were the most frequent comorbid Axis II diagnoses. Only 8.7% of the subjects met the criteria for histrionic personality disorder.¹⁶

Herman found that persons with PTSD have a problem with affect regulation. Behaviors identified in the category of affect dysregulation included difficulty modulating anger, chronic self-destructive and suicidal behaviors, difficulty modulating sexual involvement, and impulsive risk-taking behaviors.12 Van der Kolk et al¹³ found that subjects with PTSD have significantly higher rates of dissociation, somatization, and affect dysregulation. Dell found identical personality pathology in DID and chronic PTSD patients. He provided the opinion that the psychopathology of dissociative patients was more related to severity of PTSD symptoms than dissociative symptoms. The core personality pathology is avoidant and self defeating. With increased severity of illness, more borderline features are noted.34

In the Ross and Norton study group, DID patients were noted to have engaged in antisocial activities. These activities included the following: 12% patients had been convicted of a crime, 19% had worked as a prostitute, and 12% had been in jail. 18 Spanos et al³⁵ postulate that a scheme of presenting multiple personalities could be a vehicle for negotiating a difficult personal dilemma or avoiding consequences of criminal behavior, such as that presented by Kenneth Bianchi, accused of being the Hillside Strangler. Women make up approximately 87% of diagnosed cases with DID.10 As men have similar abuse rates as women, this finding has led to speculation. Men with DID may show more antisocial traits or seek treatment less frequently. Researchers have questioned whether men with DID would be more likely to be identified in prison populations than clinical populations.10

OTHER

The most common neurological symptom reported is headaches, which are often described as blinding and resistant to standard analgesics. Seizures or seizurelike activity was reported in 21% of cases. Unexplained nausea and abdominal and pelvic pain are common and found in about a third of cases.23 Complex partial seizures (also called temporal lobe epilepsy) are listed in the DSM-IV as an exclusion criteria for DID. In Ross' opinion and his review of the literature. no confirming data existed that would confirm overlap or interaction between partial complex seizures and DID. Thus, persons could have both disorders, although differentiation may be tricky without evidence on electroencephalogram. In the van der Kolk et al review of the literature, a close association between somatization and dissociation and PTSD was found.13 In women with somatization disorder, more than 90% reported some type of abuse and 80% reported sexual abuse as either a child or an adult.

RECOVERY AND TREATMENT

Another issue complicating the understanding of risk with persons with DID is the lack of agreement regarding appropriate treatment and what constitutes recovery. Kluft³⁶ notes that approximately 90% of patients who remain in treatment achieved integration of personality states. Initial study indicated that patients with clearly defined treatment dimensions responded with measured improvement. Barach reported the treatment recommendations for DID that were identified by the International Society for the Study of Dissociation (ISSD) standards of practice committee. For a successful outcome, treatment recommendations range from 2-3 years of psychotherapy for stable clients and up to 6 years for complex patients. Axis II disorders and comorbid mental disorders would increase the length of treatment. Common comorbid disorders included addictions, eating disorders, sexual disorders, mood disorders, and anxiety.37 Hospital stays

may be necessary for patients with combinations of DID and major depression or eating disorders. Medications have not been found to be generally effective, but antidepressants and anxiolytics were rated by a group of treatment providers as having moderate effectiveness.³⁸

METHODS

Claimants with DID diagnoses were identified from disability claims filed in 1997–98. A review of 6 files indicated that these claims reached the maximum duration for mental/nervous benefits despite active case management and return to work activities. These files were reviewed and a compilation of features was utilized to describe a common clinical picture of a person with DID who filed a disability claim. The compilation served to obscure the identity of any one person with DID who has filed a disability claim.

RESULTS

Susan P. is a 36-year-old technical writer for a computer-related business. She reported a history of chronic depression and suicide attempts, dating to her teenage years. She had been hospitalized on 3 occasions prior to the present illness and completed 2 inpatient detoxifications for alcohol and polysubstance abuse. She had previously been diagnosed with both dysthymia and major depression, PTSD, bipolar II, borderline personality disorder, and mixed personality disorder. She has been addressing her substance abuse and anorexia/bulimia through Alcoholics Anonymous and Overeater's Anonymous during her previous year of sobriety. The current episode of major depression was precipitated by a recent divorce and custody battle with her third husband. She was described as very bright and capable by her policyholder, but they had grave concerns about continued employment because of her mood swings, irritability, and uneven attendance.

During the hospitalization for major depression at the onset of her current illness, the hospital staff identified dissociative episodes, and the claimant began to relate her history of internal voices that she had never reported on prior hospitalizations. The claimant identified 12 alters with the help of the staff and left the hospital with a referral to a therapist who specialized in care for patients with DID. With several months of therapy aimed at helping her identify her system of alters and address experiences related to severe childhood physical, emotional, and sexual abuse, the claimant was now chronically depressed, suicidal, and unable to return to work. The therapist had recommended that the claimant apply for Social Security disability and expected 2-3 years for recovery. The claimant no longer had insurance through her company and did not know how long she would be able to maintain her health insurance through Cobra.

CONCLUSIONS

Morbidity

Attempted suicide would logically be a significant risk factor for morbidity and an unacceptable risk for both short-term and longterm disability and for waiver premium often sold with life insurance. These individuals are frequently very emotionally, fragile individuals and when put in stressful situations in the workplace will decompensate so as to be unable to perform the duties of their own or any occupation. Many may become restricted from the workplace for fear of excessive risk of relapse of major symptomatology. The confounding comorbid mental conditions such as bipolar disorders, affective disorders, and personality disorders can all be quite limiting. Memory lapses, alter personalities with hostile or destructive tendencies, and avoidance of interpersonal contact would present problems for employment in the short and long term. Rossini et al found that patients with DID fell into the average range of intellectual abilities on the Wechsler Adult Intelligence Scale-Revised test but had greater scatter than would be expected on verbal

subtests. The deficit was manifested in difficulty with concentration and distractibility.³⁹ This pattern of deficits would have a great impact on the patient's ability to perform job responsibilities requiring focus and attention. The lack of accepted treatment and prolonged treatment periods to integration and clinical improvement would make this group high risk for prolonged periods of work absences.

Mortality

Despite deinstitutionalization and more effective diagnosis and treatment of various psychiatric conditions, several recent studies have shown an excess number of natural deaths in psychiatric patients. This may be because patients with serious but undetected physical disorders are selectively referred to psychiatric clinics.40 There is still marked excess in unnatural deaths, primarily due to suicides, accidents, and homicides. In a followup of 500 psychiatric outpatients over a 6-12year period, death from unnatural causes occurred at three and a half times the expected rate, which is a significant increase.40 The rates of suicide were nearly 15 times that expected, and homicide nearly 5 times that expected. Accidents, including overdoses not ruled suicides by the coroner, were seen at more than twice the rate expected in the normal population. Excessive rates of unnatural deaths, particularly suicide, have been observed in virtually every study of mortality in psychiatric patients.41

Suicide is the most important reason for excess mortality in the psychiatric population. Completed suicide in the psychiatric population tends to occur at younger ages. A comparison of psychiatric patient suicides and those in the general population gives a ratio of 5:1.⁴² The rate of suicide among psychiatric patients is 30 times that of the general population in those suffering with affective disorders.⁴³ Overall, suicide may range from 10–15% in various mental disorders, and it is very difficult to predict which patients will attempt or commit suicide. Thus, statistical measures are used in underwriting this

group of individuals.⁴⁴ Because of the number of comorbid conditions, persons with DID would be categorized as very high to unacceptable substandard mortality risks.

REFERENCES

- American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition. Washington DC: American Psychiatric Association; 1994.
- 2. Saxe GN, van der Kolk BA, Berkowitz R, et al. Dissociative disorders in psychiatric inpatients. *Am J Psychiatry*. 1993;150:1037–1042.
- 3. Murray JB. Dimensions in multiple personality disorder. *J Gen Psychol.* 1994;155:233–246.
- 4. Horen SA, Leichner PP, Lawson JS. Prevalence of dissociative symptoms and disorders in an adult psychiatric inpatient population in Canada. *Can J Psychiatry*. 1995;40:185–191.
- 5. Latz TT, Kramer SI, Hughes D. Multiple personality disorder among female inpatients in a state hospital. *Am J Psychiatry*. 1995;152:1343–1348.
- 6. Ross CA, Anderson G, Fleisher WP, Norton GR. The frequency of multiple personality disorder among psychiatric inpatients. *Am J Psychiatry*. 1991;148:1717–1720.
- 7. Von Braunsberg MJ. Multiple personality disorder: an investigation of prevalence in three populations. In: *Dissertation Abstracts International 1994;54: 5955B.*
- 8. Rifkin A, Ghisalbert G, Dimatou S, Jin C, Sethi M. Dissociative identity disorder in psychiatric inpatients. *Am J Psychiatry*. 1998;155:844–845.
- 9. Ross CA. Epidemiology of multiple personality disorder and dissociation. *Psychiatr Clin North Am.* 1991;14:503–517.
- 10. Ross CA, Norton GR, Wozney K. Multiple personality disorder: an analysis of 236 cases. *Can J Psychiatry*. 1989;34:413–418.
- Ross CA. Diagnosis of dissociative identity disorder. In: Cohen LM, Berzoff J, Elin M, eds. *Dissociative Identity Disorder: Theoretical and Treatment Controversies*. Northvale, NJ: Jason Aronson, Inc.; 1995: 261–284.
- Herman, J. Complex PTSD: a syndrome of prolonged and repeated trauma. *J Trauma Stress.* 1992; 5:377–391.
- van der Kolk BA, Pelcovitz D, Roth S, Mandel FS, McFarlane A, Herman JL. Dissociation, affect dysregulation and somatization: the complex nature of adaptation to trauma. Available at: http:// www.trauma-pages.com/vanderk5.htm. 1996.
- 14. Sidran Foundation. (1998). Dissociative identity disorder (multiple personality disorder). Available

- at Trauma Resource Area at: http://www.sidran.org/didbr.html.
- Pribor EF, Dinwiddie SH. Psychiatric correlates of incest in childhood. Am J Psychiatry. 1992;149:52– 56
- 16. Ellason JW, Ross CA, Fuchs DL. Lifetime Axis I and II comorbidity and childhood trauma history in dissociative identity disorder. *Psychiatry.* 1996; 59:255–266.
- 17. Ellason JW, Ross CA. Positive and negative symptoms in dissociative identity disorder and schizophrenia: a comparative analysis. *J Nerv Ment Dis.* 1995;183:236–241.
- 18. Ross CA, Norton GR. Suicide and parasuicide in multiple personality disorder. *Psychiatry.* 1989;52: 365–371.
- 19. Ross CA, Dua V. Psychiatric health care costs of multiple personality disorder. *Am J Psychother.* 1993;47:103–112.
- Putnam FW. Diagnosis and Treatment of Multiple Personality Disorder. New York, NY: Guilford Press; 1989.
- 21. Goff DC, Olin JA, Jenike MA, Baer L, Buttolph ML. Dissociative symptoms in patients with obsessive-compulsive disorder. *J Nerv Ment Dis.* 1992;180: 332–337.
- 22. Ellason JW, Ross CA. Two-year follow-up of inpatients with dissociative identity disorder. *Am J Psychiatry*. 1997;154:832–839.
- 23. Putnam RW, Guroff JJ, Silberman EJ, Post RM. The clinical phenomenology of multiple personality disorder: review of 100 recent cases. *J Clin Psychiatry*. 1986;47:285–293.
- 24. Anderson G, Yasenik L, Ross CA. Dissociative experiences and disorders among women who identify themselves as sexual abuse survivors. *Child Abuse Negl.* 1993;17:677–686.
- 25. McCauley J, Kern DE, Kolodner K, et al. Clinical characteristics of women with a history of childhood abuse. *JAMA*. 1997;277:1362–1368.
- 26. Felker B, Yazel JJ, Short D. Mortality and comorbidity among psychiatric patients: a review. *Psychiatr Serv.* 1996;47:1356–1363.
- 27. Dunn GE, Paolo AM, Ryan JJ, Van Fleet J. Dissociative symptoms in a substance abuse population. *Am J Psychiatry.* 1993;150:1043–1047.
- 28. Goldberg LA. Sexual abuse antecedent to anorexia nervosa, bulimia, and compulsive overeating: three case reports. *Int J Eat Disord* 1987;6:675–680.
- 29. Levin AP, Kahan M, Lamm JB, Spauster E. Mul-

- tiple personality in eating disorder patients. *Int J Eat Disord* 1993;13:235–239.
- 30. Coons PM, Bowman ES, Milstein V. Multiple personality disorder: a clinical investigation of 50 cases. *J Nerv Ment Dis.* 1988;176:519–527.
- 31. Fink D, Golinkoff M. Multiple personality disorder, borderline personality disorder, and schizophrenia: a comparative study of clinical features. *Dissociation*. 1990;3:127–134.
- Kung HC, Liu X, Juon HS. Risk factors for suicide in caucasions and african-americans: a matched case-control study. Soc Psychiatry Psychiatr Epidemiol. 1998;33:155–161.
- 33. Kaplan ML, Asnis GM, Lipschitz DS, Chorney P. Suicidal behavior and abuse in psychiatric outpatients. *Compr Psychiatry*. 1995;36:229–235.
- 34. Dell PF. Axis II pathology in outpatients with dissociative identity disorder. *J Nerv Ment Dis.* 1998; 186:352–356.
- 35. Spanos NP, Weekes JR, Bertrand LD. Multiple personality: a social psychological perspective. *J Abnorm Psychol.* 1985;94:362–376.
- 36. Kluft RP. Treatment trajectories in multiple personality disorder. *Dissociation*. 1994;7:63–76.
- 37. Barach PM. Guidelines for treating dissociative identity disorder (multiple personality disorder) in adults. International Society for the Study of Dissociation. Available at: http://www.issd.org/isdguide.htm.
- 38. Putnam FW, Loewenstein RJ. Treatment of multiple personality disorder: a survey of current practices. *Am J Psychiatry*. 1993;150:1048–1052.
- 39. Rossini ED, Schwartz DR, Braun BG. Intellectual functioning of inpatients with dissociative identity disorder and dissociative disorder not otherwise specified. Cogntive and neuropsychological aspects. *J Nerv Ment Dis.* 1996;184:289–294.
- Martin RL, Cloninger CR, Guze SB, Clayton PJ. Mortality in follow up of 500 psychiatric outpatients. Total mortality. *Arch Gen Psychiatry*. 1985; 42:47–54.
- 41. Eastwood MR, Stiasny S, Meier HM, Woogh CM. Mental illness and mortality. *Compr Psychiatry*. 1982;23:377–385.
- 42. Morrison JR. Suicide in a psychiatric practice population. *J Clin Psychiatry*. 1982;43:348–352.
- 43. Guze SB, Robins SB. Suicide and primary affective disorders. *Br J Psychiatry*. 1970;117:437–438.
- 44. Brackenridge RDC, Elder WJ. *Medical Selection of Life Risks.* 4th ed. Indianapolis: Macmillan; 1998.