

DIAGNOSIS, EPIDEMIOLOGY,  
CLINICAL COURSE,  
TREATMENT, AND  
COST EFFECTIVENESS  
OF TREATMENT FOR  
DISSOCIATIVE DISORDERS  
AND MPD: REPORT SUBMITTED  
TO THE CLINTON  
ADMINISTRATION TASK  
FORCE ON HEALTH CARE  
FINANCING REFORM

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## ABSTRACT

*Dissociative disorders are highly prevalent mental disorders in North America with a reported prevalence of about ten per cent in the general population. The prevalence of these disorders is related to the prevalence of trauma in the general population. Multiple personality disorder (MPD) is a severe chronic mental disorder that affects about one per cent of the general population in North America and is associated with an early childhood history of severe trauma, primarily multiple forms of abuse before the age of five. MPD patients are already present in the mental health treatment system in substantial numbers. MPD patients commonly average 6 to 12 years in unproductive treatment and/or social welfare systems prior to correct diagnosis.*

*There is evidence of considerable treatment efficacy for an intensive form of psychotherapy for MPD. Further, there is evidence for cost effectiveness of treatment of MPD with substantial savings once correct treatment is initiated. Despite this, there appear to be subgroups of MPD patients with one patient group showing rapid resolution of all dissociative psychopathology and another group showing more chronicity. The latter group does achieve cost effectiveness*

*for treatment, but at a slower rate. One major variable in discriminating these groups was the length of time in the mental health treatment system before correct diagnosis with the more slowly responsive group having a much longer chronic treatment career prior to correct diagnosis.*

## INTRODUCTION

This report summarizes current data on the dissociative disorders. I will discuss basic definitions of dissociation, prevalence of dissociative disorders in clinical populations, the relationship of dissociative disorders to traumatic experiences, particularly early childhood abuse, treatment outcome data, and data regarding cost effectiveness of treatment for these conditions. This report will emphasize data on multiple personality disorder (MPD), the most severe form of the dissociative disorders. MPD is the dissociative disorder that has been studied most systematically and for which the most data is available.

## DISSOCIATION

*DSM-III-R* (American Psychiatric Association, 1987) defines dissociation as: a "disturbance or alteration in the normal integrative function of memory, identity, or consciousness" (p. 269). Clinically, dissociation is thought to exist along a continuum of severity. It can produce "a range of clinical and behavioral phenomena involving alterations in memory and identity that play important roles in normal and pathological mental processes. In extreme cases, it gives rise to a set of psychiatric syndromes known as the dissociative disorders" (Putnam, 1991, p.145)

Dissociation can be conceptualized as a basic part of the psychobiology of the human trauma response. In dissociation, there is thought to be protective activation of altered states of consciousness as a reaction to overwhelming psychological trauma. Memories and affects relating to the trauma are encoded during these altered states. When the person returns to the baseline state, there is less access to the dissociated information. Thus, in many cases, there is a psychogenic (dissociative) amnesia for the traumatic events. However, the dissociated memories and affects manifest themselves in non-verbal forms: post-traumatic nightmares, re-

enactments, intrusive imagery, and somatoform symptoms. In addition, not only is the trauma dissociated, but the person frequently has dissociated that certain basic assumptions about the self, relationships, other people, and the nature of the world have been altered by the trauma.

This view of dissociation is supported by virtually every systematic study and comprehensive review of dissociation and dissociative disorders in the literature: overtly traumatic circumstances such as child abuse, war-time trauma, natural disasters, and civilian violence are extraordinarily prevalent in the histories of dissociating patients or in the immediate circumstances in which dissociative symptoms are manifested (Cardena & Spiegel, 1993; Loewenstein, 1991b; Putnam, 1985; Spiegel, 1991).

The *DSM-III-R* dissociative disorders are psychogenic (dissociative) amnesia, psychogenic (dissociative) fugue, depersonalization disorder, multiple personality disorder, and dissociative disorder NOS (DDNOS). In *DSM-IV*, the term "psychogenic" will be replaced by dissociative to characterize amnesia and fugue.

### PREVALENCE OF DISSOCIATIVE DISORDERS

There have been a number of studies that examine the prevalence of dissociative disorders in various populations. There is also a literature that examines the prevalence of histories of traumatic experiences in individuals who meet diagnostic criteria for dissociative disorders. A series of recent studies use standardized scales or interviews for the diagnosis of dissociative disorders. These instruments include the Dissociative Experiences Scale (DES), a reliable and valid self-report screening instrument for dissociative disorders (Bernstein & Putnam, 1986) that has been studied in many different clinical populations (Carlson et al., 1993). The structured interviews in use for diagnosis of the dissociative disorders are the Dissociative Disorders Interview Schedule (DDIS) (Ross, Heber, Norton, & Anderson, 1989) and the Structured Clinical Interview for *DSM-III-R* Dissociative Disorders (SCID-D) (Steinberg, Rounsaville, & Cicchetti, 1990). (Also see Loewenstein, (1991b) and Ross, (1991) for reviews of the epidemiology of dissociative disorders).

#### Findings

- Dissociative amnesia and dissociative fugue were reported to occur in 5% to 14.4% of soldiers in combat during World War II. As many as 35% of soldiers in the most severe combat had dissociative amnesia for these events (Sargent & Slater, 1941).
- Amnesia and memory problems were reported to be more prevalent in Korean and Vietnam era veterans who had combat-related PTSD as compared to controls (Archibald & Tuddenham, 1965; Hendin, Haas, Singer, Houghton, Schwartz, & Wallen, 1984).
- 59.6% of a sample of 468 adult men and women with a history of childhood sexual abuse reported amnesia for the abuse at some time in their lives. Amnesia was associated with abuse of greater severity, earlier onset, repetitive and injurious abuse, multiple perpetrators, and direct threats of harm to the victim (Briere & Conte, 1993).
- 38% of 100 women with a documented episode of childhood sexual abuse had amnesia for this incident on detailed re-interview in adulthood (Williams, 1992).
- Using the DES and the DDIS, 20.7% of 299 general hospital psychiatry inpatients were found to meet diagnostic criteria for a dissociative disorder, with 5.4% having MPD (Ross, Anderson, Fleisher, & Norton, 1991).
- Using the DES and the DDIS, 12 (35%) of 34 adolescents assessed at a psychiatric facility were found to have a dissociative disorder, with 6 (17%) having MPD (Ross, 1991).
- Using the DES and the DDIS, 39 (39%) of 100 adults with chemical dependency problems also had a dissociative disorder with 14 (14%) meeting diagnostic criteria for MPD (Ross et al., 1992).
- Using the DES and the DDIS, 88.5% of 51 women who presented for mental health treatment as survivors of childhood sexual abuse were reported to have a dissociative disorder (Ross et al., 1992).

TABLE 1  
Prevalence of Dissociative Disorders in the  
General Population

Diagnosis	% of subjects
Psychogenic Amnesia	7.0
Depersonalization Disorder	2.4
Multiple Personality Disorder	1.3
Psychogenic Fugue	0.2
DDNOS	0.2
All Dissociative Disorders	11.2

### General Population Studies of Dissociative Disorders

- Using the DES and the DDIS, Ross (Ross, 1991; Ross, Joshi, & Currie, 1990) examined 1005 randomly selected people from the general population of Winnipeg, Canada. In this study, the lifetime prevalence of a dissociative disorder was 11.2%. Table 1 shows the prevalence of dissociative disorders in approximately 500 of the respondents to the original study.

### Prevalence of a History of Trauma in Individuals with Dissociative Disorders

- 89% of a group of patients meeting *DSM-III-R* criteria for psychogenic amnesia or DDNOS had histories of childhood sexual abuse, physical abuse, verbal abuse, and/or neglect in childhood. About 50% of the sample had suffered adult trauma such as a rape (Coons, Bowman, Pellow, & Schneider, 1989).
- In a clinical case series of 25 patients meeting *DSM-III-R* criteria for psychogenic amnesia, childhood sexual abuse was reported by 52%, physical abuse by 40%, neglect (16%), and abandonment (12%) (Coons & Milstein, 1992).

The prevalence of dissociative disorders in these studies is not surprising since traumatic experiences are very common in the general population. Similarly, there are high prevalence rates for post-traumatic stress disorder (PTSD) in the general population. Prevalence figures for PTSD have been 8 - 16% in general population studies, making it one of the most common mental disorders (Davidson & Fairbank, 1993; Davidson & Foa, 1993).

In addition, systematic studies in community and clinical samples have documented high rates of sexual abuse, trauma, and victimization (Finkelhor, 1986).

- Russell (Russell, 1983; 1986) found that about 38% of women have had an experience of sexual abuse and about 4.5% reporting father-daughter incest. About one-quarter of the intrafamilially abused group reported the most serious forms of incest involving repeated penetration, fellatio, sodomy, etc., both with and without force. This sort of abuse is associated with a greater likelihood of amnesia for the abuse at some time in the individual's life.

Similarly, studies report a substantial prevalence for a history of childhood trauma and sexual abuse for patients in mental health treatment.

- Bryer et al. (Bryer, Nelson, Miller, & Kroll, 1987), in a prospective study, reported that about 60% of female psychiatric inpatients had a history of childhood physical or sexual abuse and that about

72% of their sample had such a history in childhood or adulthood.

Similarly, studies of clinical samples from outpatient, emergency room, and substance abuse facilities have documented high rates of childhood and adult physical and sexual abuse in men and women seeking treatment. Subgroups among these individuals are likely to show clinical evidence of a dissociative disorder (Loewenstein, 1991b; Loewenstein & Putnam, 1990).

### MULTIPLE PERSONALITY DISORDER

Multiple personality disorder is the most severe, chronic dissociative disorder. Also, MPD is the dissociative disorder that has been studied the most in systematic research studies of phenomenology, psychobiology, epidemiology, treatment, cost efficacy, etc. MPD patients have a substantial impact on the mental health treatment and social welfare systems, especially before they are correctly diagnosed and treated. In addition, outcome data suggests that MPD is a treatable disorder and that correct treatment can reduce costs of care in the mental health treatment and social services systems.

#### Diagnostic Criteria

*DSM-III R* defines MPD as: (a) The existence within the person of two or more distinct personalities or personality states (each with its own relatively enduring pattern of perceiving, relating to, and thinking about the environment and self); (b) At least two of these personality states recurrently takes full control of the person's behavior. (American Psychiatric Association, 1987, p. 272)

MPD can be understood as a complex form of developmental post-traumatic dissociative disorder, primarily related to severe, repetitive childhood abuse or trauma, usually beginning before the age of five. In MPD, it is thought that dissociative defenses are used to protect the child from the full psychological impact of severe trauma, usually extreme, repetitive child abuse. Under the pressure of a variety of developmental factors secondary structuring and personification by the child of the traumatically induced dissociated states of consciousness leads to development of multiple "personalities." For a complete discussion of this, see Putnam (1989).

Virtually every systematic study of patients with multiple personality disorder documents a very high rate of childhood trauma, particularly childhood abuse in the histories of adults with MPD and children with MPD or DDNOS. There are now at numerous studies in the literature on adult MPD based on questionnaire, case series, or structured interview data (Boon & Draijer, 1993; Coons, 1988; Loewenstein & Putnam, 1990; Putnam, Guroff, Silberman, Barban, & Post, 1986; Rivera, 1991; Ross et al., 1991; Ross, Miller, Reagor, Bjornson, Fraser, & Anderson, 1990; Schultz, Braun, & Kluff, 1989). These studies have produced remarkably concordant findings despite differing methodologies, study samples, and cross-cultural sample groups.



- Rates of reported childhood sexual abuse in these patients range from 68.0% to 90.2%. Males reported an 85% rate of childhood sexual abuse in a clinical case series of 21 cases. Rates of reported physical abuse were 60.0% to 94.0% with the highest rate in the male sample. Rates of childhood physical and/or sexual abuse ranged from 88.5% to 96.0%. Substantial rates of other kinds of abuse were also reported by these patients. These included witness to family violence or murder, neglect, medical abuse or neglect, confinement abuse, involvement in criminal activity such as child pornography, and other extreme forms of systematized sadistic abuse. Reported abuse was primarily intrafamilial. Mean number of types of abuse per patient ranged from 2.95 to 4.8. Abuse generally began before the age of 5 and, in one study, the average duration of the sexual abuse was 11.7 years and of the physical abuse, 14.0 years (Ross, et al., 1991).
- In concordance with these findings, several studies document an 80% rate of a co-morbid diagnosis of *DSM-III-R* post-traumatic stress disorder (PTSD) in MPD patients (Armstrong & Loewenstein, 1990; Boon & Draijer, 1993; Dell & Eisenhower, 1990; Kluft, 1988a; Kluft, 1991).

#### MPD in Childhood and Adolescence

Recent studies have begun to identify childhood and adolescent cases of MPD and DDNOS. The earliest case of MPD has been described in a child of three who was studied intensively as part of a custody/adoption battle (Riley & Mead, 1988). Clinical case studies have identified sexual, physical abuse and other early traumatic experiences as highly prevalent in these dissociative children. Also, studies have described substantial prevalences of MPD and other dissociative disorders as well as childhood histories of trauma and abuse in the parents and/or other first degree relatives of these children (Dell & Eisenhower, 1990; Hornstein & Tyson, 1991).

- Hornstein and Putnam (1992) reported on the clinical characteristics of 64 children with MPD or related forms of DDNOS. These patients had a cluster of symptoms and clinical characteristics similar to those of MPD/DD adults. In 95.3% of the cases in this series, there was documented childhood abuse including sexual abuse and/or physical abuse, neglect, exposure to domestic violence, etc. MPD children had higher rates of abuse with 70% reporting physical abuse, and 80% reporting sexual abuse.

#### Impact of MPD Patients on the Mental Health System

Like other patients with post-traumatic disorders, MPD patients generally do not present for treatment with complaints obviously or directly related to dissociative or post-traumatic symptoms (Kluft, 1985b; Loewenstein, 1991a).

Rather, they come to treatment with complaints of depression, mood swings, self-mutilatory and/or suicidal behavior, apparent psychotic symptoms, anxieties and phobias, substance abuse, eating disorders, sleep problems, and somatoform symptoms. Studies repeatedly document that MPD patients spend many unproductive, costly years in mental health treatment before correct diagnosis, receiving a plethora of different diagnoses, and showing little sustained response to treatments for affective, anxiety, psychotic, personality, and other disorders (Boon & Draijer, 1993; Fraser & Raine, 1992; Loewenstein & Putnam, 1990; Putnam, et al., 1986; Rivera, 1991; Ross & Dua, 1993; Ross, et al., 1991; Ross, et al., 1990). Similarly, data on childhood MPD shows a similar pattern of misdiagnosis as in adult patients (Hornstein & Putnam, 1992; Hornstein & Tyson, 1991). In addition, another subset of MPD patients receive multiple costly neurological, surgical and medical evaluations and treatments for their somatoform symptoms (Loewenstein, 1990; Putnam, 1989). The most common somatoform symptoms manifested by these patients include headaches, other forms of unexplained pain, gastrointestinal complaints, and pseudoneurological symptoms such as seizure-like episodes (Putnam, et al., 1986).

- Putnam et al. (1986) found that a sample of 100 MPD patients averaged 6.8 years in mental health treatment receiving an average of 3.5 other psychiatric and/or neurologic diagnoses before being correctly diagnosed with MPD.
- Rivera (1991) found that a Canadian MPD sample had also averaged 6.8 years in prior mental health treatment receiving 3.0 prior diagnoses before acquiring the correct diagnosis. These patients had averaged 4.0 psychiatric hospitalizations each.
- Boon and Draijer (1993) characterized a Dutch MPD sample of 71 patients studied with the DES and the SCID-D. They found that MPD patients had spent an average of 8.2 years in mental health treatment receiving 2.8 different prior diagnoses before the correct one. Of their sample, 60.6% had had at least one psychiatric hospitalization and 19.6% had been hospitalized 4.0 or more times.
- Hornstein and Putnam (1992) found that their cohort of severely dissociative children had received an average of 2.7 prior diagnoses before that of MPD or DDNOS.
- Ross et al. (1990) reported that 76.5% of 102 subjects with MPD studied with the DES and DDIS stated that their prior psychiatric treatment for non-MPD diagnoses had been ineffective.

In addition, high rates of substance and alcohol abuse and addiction and substantial prevalences of suicidal and self-destructive behaviors were reported in the histories of

these patients.

- Ross et al. (1990) and Boon and Draijer (1993) reported that about one-third to one-half of their cohorts, respectively had had an alcohol or substance abuse problem with about 10% to 15% in each sample having a major addiction problem.
- 65.7% of the Boon and Draijer cohort and 72.5% of the Ross et al. sample reported one or more serious suicide attempts.
- Rivera (Rivera, 1991) found that her Canadian sample had been extensively involved with social welfare or child welfare systems. Fifty-five percent had depended on Social Assistance/Welfare; 19% had been involved with child welfare as a child and 15% as an adult regarding their *own* children; 12% had a criminal record; 57% had abused drugs; 50% had abused alcohol.
- Loewenstein and Putnam (1990) found that about half of their 21 male MPD sample had been involved with the criminal justice system in addition to having spent long periods of time in mental health treatment with an average of 3.9 prior diagnoses. About half the sample had had significant alcohol problems and about one-third had abused drugs.

## TREATMENT OF DISSOCIATIVE DISORDERS

There are no systematic modern studies of treatment of psychogenic amnesia or psychogenic fugue, although there is a substantial literature from World War II on the treatment of acute traumatic amnesic states occurring during combat. In addition there is a civilian literature on the treatment of these conditions (Loewenstein, 1991b). The literature as a whole indicates that there are no known psychopharmacological treatments for the primary symptoms of these disorders. The main treatment of these conditions consists of psychodynamic psychotherapy supplemented by hypnotherapy, amytal narcosynthesis, and group treatment (for a review, see Loewenstein, 1991b).

### *Treatment of Multiple Personality Disorder*

The literature supports the view that the primary treatment for MPD is a long-term intensive psychotherapy with adjunctive hypnotherapy and pharmacotherapy (Putnam, 1989). As with other post-traumatic disorders, there is no generally accepted pharmacotherapy to treat the core symptoms of dissociative disorders, although adjunctive drug treatment of PTSD, affective, anxiety and obsessive-compulsive symptoms, among others, may be helpful in some cases (Bleich, Siegel, Garb, & Lerer, 1986; Friedman, 1987; Friedman, 1990). In fact, many MPD patients finally receive correct diagnosis only because they have been unresponsive to repeated adequate trials of pharmacological agents for apparent affec-

tive, anxiety, psychotic disorders, etc. (Putnam, 1989; Ross, 1989).

- Putnam and Loewenstein (1993) surveyed over 300 psychiatrists, psychologists, social workers, and other therapists about their preferred treatment for MPD. Clinicians from all specialty groups robustly ranked psychotherapy and hypnotherapy as first and second choices, respectively. Third choices varied by speciality with psychiatrists and social workers ranking pharmacotherapy third and psychologists and other therapists ranking art therapy and group therapies third. Many respondent clinicians reported that their MPD patients had exhausted all third party mental health benefits, often before the correct diagnosis had been made. Despite this, the patients were viewed as continuing to need ongoing psychotherapeutic treatment.
- Coons (1986) studied treatment outcome in 20 consecutive MPD patients treated by trainees at an outpatient community mental health clinic. Patients were treated with psychodynamic psychotherapy with adjunctive hypnotherapy and pharmacotherapy. Patients were followed for a mean of 39 months. Five patients had achieved integration (loss of all aspects of dissociative dividedness and multiplicity) and two were "partially" integrated at follow-up. Of the patients remaining in treatment, ten were rated as either moderately or greatly improved. Improvement was noted on such factors as more stability among alter personalities, increased cooperation and co-consciousness (co-awareness) among personalities, better tolerance of affects, ability to become aware of and work through traumatic memories, and less denial concerning diagnosis.
- Kluft (1988b; personal communication, March, 1993) has reported outcome data on a series of about 184 MPD patients treated personally by him with psychodynamic psychotherapy (supportive-expressive psychotherapy) with adjunctive hypnotherapy, pharmacotherapy, and expressive therapies. One hundred and fifty patients (81%) were reported to have achieved "stable fusion" by research criteria. These criteria include the requirement that all clinical signs of multiplicity and related clinical phenomena must be absent for at least 27 months before a fusion could be designated as stabilized. Patients in this study have had regular follow up for as long as two to ten years after conclusion of treatment. They are reported to have maintained complete absence of clinical manifestations of a dissociative disorder. Treatment to fusion averaged 2.5 years in a large subgroup of these patients with good pre-morbid functioning. Patients required additional post-unification treatment once fusion of all alter

personalities was achieved. Although treatment was intensive psychotherapy (minimum of two 45-50 minute sessions per week), most patients who achieved unification discontinued treatment and remained essentially well during the follow-up period.

- Kluft (1985a) reported the successful treatment of five children with MPD. Patients responded quickly to treatment and achieved fusion as rapidly as within two to four months. If no additional trauma or abuse occurred, these fusions were stable during as long as decade of follow-up. Additional anecdotal data on treatment of children suggests that there are subgroups where treatment progress is much slower. In cases of ongoing abuse, definitive treatment is impossible. Hornstein and Tyson (1991) also described successful treatment interventions for dissociative children in an inpatient setting.
- Dell and Eisenhower (Dell & Eisenhower, 1990) reported on 11 cases of adolescents with MPD. These patients responded more slowly than younger children to treatment with psychotherapy and hypnotherapy. Treatment outcome was clearly related to family factors with one family type subverting all possibility for therapeutic progress, another supporting treatment actively, and a third subtype being intermediate.
- Kluft performed a study of outcome for MPD patients who did not receive definitive treatment for their dissociative disorder. He studied a large cohort of patients seen by him in consultation and followed longitudinally for as long as a decade. No spontaneous resolution of multiplicity was noted (Kluft, 1985b). Kluft also believes that the existence of MPD makes the patient more vulnerable to victimization and/or more liable to abuse his/her own children or to permit abuse of his/her children by others (Kluft, 1987).

#### *Cost-Effectiveness of Correct Diagnosis and Treatment of MPD*

Several studies address the issue of cost effectiveness for correct diagnosis and treatment of MPD in adults. As noted above, prior to diagnosis for MPD, these patients are heavy consumers of psychiatric, social welfare, substance abuse treatment and medical services. Two factors must be considered in the analysis. First, the savings that could be realized after correct diagnosis. Second, the savings that might have resulted if MPD patients had been diagnosed and treated correctly at the beginning of their treatment careers.

- Ross and Dua (1993) studied 15 women admitted to an inpatient service for a period of four years who met *DSM-III-R* diagnostic criteria for MPD. Number of months in the mental health treatment system as well as cost of care prior to and

after MPD diagnosis were calculated in 1989 Canadian dollars. Patients had averaged 98.77 months (8.2 years; range 8 months to 29 years) in treatment prior to MPD diagnosis. After diagnosis, they averaged 31.53 months in the system (2.6 years). Before diagnosis, about 2.8 million dollars had been spent on treatment for this group. The authors made assumptions that it would average 48 months to conclusion of treatment after correct diagnosis and that, without treatment, the patients would continue in unsuccessful treatment for another ten years. With these assumptions, they calculated a savings of about \$84,900 per patient (\$1.35 million total) over the ten-year period. If the 98.77 months prior to correct diagnosis were reduced to 12 months, the savings were estimated at \$250,000 per patient (\$3.75 million for the whole sample).

At least three patient subgroups were identified. The first made rapid, straightforward clinical gains and rapidly resolved symptoms of MPD in two to three years. This was accompanied by a marked decrease cost of care. The second group was more complex, had reported ongoing abusive enmeshment with family members and required more intensive inpatient treatment. A third group did not achieve rapid fusion but had a significant decrease with respect to utilization of inpatient and emergency psychiatric services. One such patient cost \$45,800 per year for 19 years prior to the diagnosis of MPD and \$14,602 per year for 1.5 years after diagnosis.

- Fraser and Raine (1992) studied cost effectiveness of treatment for a cohort of 49 Canadian patients meeting *DSM-III-R* criteria for MPD. Non-psychiatric costs were not included. Patients had spent an average of 6.9 years in mental health treatment before correct diagnosis with an average of 3.8 erroneous prior diagnoses. Again, three subgroups were identified in terms of outcome. The first group consisted of patients who rapidly achieved unification after diagnosis of MPD. These patients averaged a cost of \$75,000 per patient per year in the three years prior to MPD diagnosis. After diagnosis, they averaged \$36,000 per patient per year for the next three years, although costs remained high during the first year after MPD diagnosis. Average cost per patient per year in years two and three after MPD diagnosis was \$10,700.

A second patient group met both *DSM-III-R* criteria for MPD and borderline personality disorder (BPD) and averaged no more than 15 alter personalities. This group showed a similar treatment cost pattern to the first group but required at least one intensive inpatient treatment stay (average LOS=1 to 2 months) on a specialized inpatient dissociative disorders unit to achieve rapid



clinical gains. The majority of patients in these two groups were out of treatment entirely by year five after diagnosis.

A third group was characterized by patients with many alter personalities (average > 15) as well as meeting diagnostic criteria for BPD. They had the longest pre-MPD diagnosis psychiatric treatment careers (average=12.4 years). The subgroup of these patients with the longest average treatment career (12.4 years) had total costs four times higher than the group with the shortest (< 3 years). The former group did not show a decrease in costs of treatment until year six after correct diagnosis. The latter group began to show a cost decrease in years three through six after diagnosis.

# CONCLUSIONS

- Dissociative disorders including MPD are common mental illnesses in North America and probably in Europe and other countries. The prevalence of these disorders is related to rates of trauma in the general population. Multiple personality disorder is the most extreme form of dissociative disorder and is thought to affect about one percent of the general population. This disorder is strongly associated with a childhood history of trauma, primarily severe sexual and physical abuse beginning in early childhood. Prevalence rates for dissociative disorders may well be higher in certain population subgroups such as those in inner cities who are subject to higher chronic rates of exposure to violence and trauma. In addition, MPD and other DD patients are quite prevalent in substantial numbers in ordinary clinical and social services settings.
- MPD is treatable by a specific form of effective psychotherapy which can result in significant improvement or apparent cure in a substantial number of MPD patients.
- Correct diagnosis and treatment has been shown to be cost effective, especially when the substantial costs of incorrect treatment before MPD diagnosis is accounted for. The highest cost for treatment was found in the group with the longest chronic psychiatric career prior to correct diagnosis. Hidden costs must also be considered for the incorrect diagnosis of the MPD patient. These include medical costs for suicidal and parasuicidal behaviors as well as for somatoform and psychophysiological disorders commonly found in these patients. Other hidden costs include those of multi-generational abuse and trauma: a subgroup of MPD patients are at risk to abuse their children or to leave their children vulnerable to abuse (Kluft, 1987). In addition, there are costs of lost income and payment of disability and social security for patients who have become unable to work.

- Specialized dissociative disorders treatment programs may be an important resource for the stabilization and treatment of some of these patients. In addition, development of specialized community mental health center programs for diagnosis, treatment, and prevention of dissociative and other post-traumatic disorders may offer clinically effective and cost effective treatment for patients who otherwise would consume substantial health care resources.
- The short- and long-term psychiatric effects of domestic violence and childhood abuse and trauma represent the most important, most common preventable cause of mental illness in our society. Treatment of those already suffering from childhood-onset dissociative disorders is actually one part of prevention by helping slow the multi-generational spread of intrafamilial abuse and violence. ■

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