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Epidemiology of Multiple Personality Disorder and Dissociation

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In 1984 when the *Psychiatric Clinics of North America* devoted a special issue to multiple personality disorder (MPD),[5] nothing was known about the epidemiology of either MPD or dissociation. On the basis of clinical experience, a small number of psychotherapists knew in the mid-1980s that MPD was not rare,[55] but there were no systematic studies to confirm this knowledge. In 1987 it was stated in DSM-III-R, with necessary caution, that MPD "might not be as rare as previously thought"[1] but there were still no epidemiologic data about any of the dissociative disorders (DDs). Such information was not available until 1990, and did not appear in the literature, except in abstract form,[13] until this issue of the *Psychiatric Clinics of North America.*

In 1984, reports of the incidence of MPD in clinical populations began to appear. None of these involved the use of standardized questionnaires or interviews, but the findings were striking. Bliss and Jeppsen[4] diagnosed MPD in 11.3% of 150 patients screened for dissociation and considered an additional 15.3% to have extensive amnesia. Putnam, Loewenstein, Silberman, and Post[26] diagnosed three cases of MPD among approximately 225 inpatients (1.3%). Ross[44] diagnosed three cases of MPD in 68 general adult psychiatric inpatients (4.4%) during a 1-year period, and Graves[9] found three cases of MPD (2.4%) and eight cases of dissociative disorder not otherwise specified (DDNOS) (6.4%) among 125 patients, by carefully reviewing his caseload.

The frequency of diagnosed MPD in clinical populations increased exponentially during the 1980s. At the beginning of the decade only

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about 200 cases had been reported in the entire world literature,[10] but in 1986 Coons[7] estimated that 6000 cases of MPD had been diagnosed in North America. In 1985 Kluft[16] reported clinical contact with 140 cases of MPD referred to him by 90 different professionals, and noted that a poll of 70 students at a workshop yielded a total of 267 cases seen by the group.

In 1989 Ross, Norton, and Wozney[44] published a series of 236 cases of MPD reported to them by 203 clinicians who jointly had seen 1807 cases. By May 1990, five large series of cases totaling 843 individuals had been published in a span of 4 years.[8,25,41,44,50] This is an unprecedented shift in psychiatric epidemiology.

I estimate that the number of mental health professionals who made their first independent diagnosis of MPD during the 1980s in North America is between 1000 and 5000. Counting ward nursing staff, nonmedical therapists, psychiatry residents on call, community-based counselors, and all other mental health professionals, I estimate that as many as 10,000 professionals have had direct contact with diagnosed MPD cases in North America during the last 10 years. I am referring only to professionals who considered the diagnosis to be legitimate and correct.

These developments suggest that DDs may be relatively common in the general population. Before describing the epidemiologic study of the prevalence of DDs we have conducted, I will discuss the prevalence of other psychiatric disorders and of childhood trauma in the general population, to establish a context for our findings.

PREVALENCE OF OTHER PSYCHIATRIC DISORDERS

Could the DDs affect 10% of the general population? If, for example, depression affects only 0.4% of the general population, one would not expect DDs to be 25 times as common.

The definitive epidemiologic studies in North American psychiatry were done using the Diagnostic Interview Schedule (DIS).[28] This standardized highly structured diagnostic interview makes numerous DSM-III-R diagnoses, but it does not inquire about any of the DDs. The findings using the DIS are that 6.1% to 9.5% of the general population has suffered from an affective disorder, 10.3% to 25.0% from an anxiety disorder, and 15.0% to 18.1% from substance abuse.[16] These are the most common forms of psychopathology in North America. If simple phobia is removed from the anxiety disorder category, the range for anxiety disorders is 3.4% to 4.4%. Schizophrenia and bipolar mood disorder, by contrast, each affect about 1% to 2% of the general population.

In 1980, John Nemiah,[22] summarizing the knowledge of the field at that time, estimated that obsessive-compulsive disorder affects about 1 individual in 2000 in the general population. The epidemiologic fieldwork done with the DIS showed in 1984 that obsessive-compulsive disorder actually affects 1.9% to 3.0% of the general population.[16] The

prevalence of obsessive-compulsive disorder was adjusted upwards by an order of magnitude over a period of 4 years.

Our knowledge of the epidemiology of other psychiatric disorders suggests that the DDs could well affect 10% of the general population. I can think of no a priori reason why dissociation should be less common than anxiety or depression, or why MPD should be less common than obsessive-compulsive disorder. Other psychiatric disorders, notably obsessive-compulsive disorder, have recently been shown to be more common than previously thought, and such a shift could also occur for the DDs.

PREVALENCE OF CHILDHOOD TRAUMA

Because the DDs, especially MPD, DDNOS, and psychogenic amnesia, are directly linked to trauma,[14,24,29] one would expect them to be common if psychosocial trauma is common. Because more than 90% of persons with a clinical diagnosis of MPD have been victims of physical and/or sexual abuse in childhood,[15] the upper limit for the prevalence of complex posttraumatic MPD is set by the prevalence of severe child abuse.

Bagley and King[2] recently summarized all major studies on the prevalence of childhood sexual abuse in North America. They stated that, "serious sexual abuse in childhood (up to age 16 or 17) involving unwanted or coercive sexual contact occurs in at least 15% of females in the populations surveyed, and in at least 5% of males." A problem with these studies is that complete information concerning age at onset, number of perpetrators, identity of perpetrators, types of acts performed, frequency and duration of the abuse, and concurrent physical abuse are not always available.

The abuse reported by clinically diagnosed MPD patients is extreme: In a series of 102 cases, both the physical and sexual abuse started before age 5 in more than 50% of cases, and the average duration of both forms of abuse was more than 10 years.[39] These are conservative figures because of the extensive amnesia still in place at the time of assessment of these survivors (this is likely true of general population data on childhood trauma as well).

To perform a calculation of the upper limit for the prevalence of MPD, I will select a prevalence of serious, chronic childhood physical and/or sexual abuse of 5% in North America. The next factor in Kluft's four-factor theory of the etiology of MPD[17] to consider is innate dissociative capacity. On the basis of hypnotizability data, I will arbitrarily select 50% as the percentage of children under age 10 who have high dissociative capacity.[45] This yields a figure of 2.5% of the general population at high risk for MPD. If the prevalence of serious child abuse is reduced to 2%, which is low, and the percentage of high-dissociative children is set at 25%, then 0.5% of the general population is at high risk for complex posttraumatic MPD.

Large-scale studies of hypnotizability in the general population,

which are reviewed in an article on dissociative experiences among normal adolescents and college students,[24] consistently show a peak in hypnotizability in late childhood or early adolescence, and conclude that a substantial proportion of young children are highly hypnotizable. The figures I used earlier are ballpark estimates of the percentage of children who are highly dissociative, made for discussion purposes and are not scientific findings to be taken as established facts.

Bearing that in mind, it is reasonable to conclude that MPD could affect 1% of adults in North America.

In 1980 in the brief section of the *Comprehensive Textbook of Psychiatry* dealing with incest,[47] the only epidemiologic comment is a reference to a 1955 paper estimating that incest affects one family out of a million in North America. This estimate was low by four orders of magnitude. Similarly, at the time of publication of *The Three Faces of Eve* (1957), the prevalence of MPD was thought to be less than one in a million in the general population.

There has been a lag period between the correction of estimates of the prevalence of childhood sexual abuse and correction of the estimates of the prevalence of DDs, which are directly related to childhood trauma. Child abuse underwent a ten thousand-fold shift in prevalence in a very short time, and was transformed from a vanishingly rare curiosity to a major public health problem. It is premature to discuss the shift in the epidemiology of the DDs in the past tense, because the findings presented below must be replicated and verified before they can be generally accepted. Nevertheless, the high rate of severe childhood trauma in North America makes it conceivable that the DDs are common.

AVAILABILITY OF STANDARDIZED MEASURES OF DISSOCIATION

I will briefly review the available measures of dissociation for those readers not familiar with them and say why I chose the questionnaires used in the project.

Until the appearance of the Dissociative Experiences Scale (DES) in 1986,[3] there was no valid and reliable way to measure dissociation. Therefore, systematic studies of the general population were not possible. Several other self-report measures of dissociation,[27,48] though promising, do not have the demonstrated validity and reliability of the DES[29]; therefore I chose the DES for the general population survey described below.

There are two structured interviews for making DD diagnoses: The Dissociative Disorders Interview Schedule (DDIS)[29,35] and the Structured Clinical Interview for DSM-III-R Dissociative Disorders (SCID-D).[51] These should be coadministered along with the DIS to a large random sample of the general population. Such study would allow for cross-validation of the two structured interviews for DDs, and would elucidate the relationship between childhood trauma and the major

DSM-III-R diagnoses in contemporary psychiatry. I chose the DDIS for my study because it is my own interview schedule and because it gathers extensive data on childhood trauma.

The DES has a test-retest reliability of 0.84, good split-half reliability, and good clinical validity.[3] Group median scores on the DES differentiate MPD from other diagnostic groups. Scores above 30 on the DES are strongly suggestive of a DD in clinical populations: MPD patients have median scores in the 40s or 50s, depending on the center and source of patients.[3,43]

The DDIS is a 131-item structured interview with an overall interrater reliability of 0.68.[35] The false-positive rate for a DDIS diagnosis of MPD is under 1% in clinical populations. In more than 500 administrations of the DDIS to clinically diagnosed adult subjects in a variety of diagnostic groups, we have encountered four DDIS false-positive diagnoses of MPD. One occurred in a white Vietnam veteran who was referring to a dissociation of his identity that occurred between his English-speaking military self and his Vietnamese-speaking civilian self while in Vietnam. This dissociation had spontaneously integrated upon returning to the US. He had no history of child abuse, but continued to exhibit high dissociative capacity in his personal life until 1990. The other three DDIS false-positive diagnoses occurred in patients with schizophrenia who exhibited many dissociative features and presented difficult problems in differential diagnosis.

PREVALENCE OF DDs IN CLINICAL POPULATIONS

The rationale for conducting a study of the prevalence of DDs in the general population is the realization that they occur commonly in clinical populations. We have surveyed a number of different clinical populations for the prevalence of DDs using the DES and DDIS. Out of 100 adults with chemical dependency problems, we found that 39% had a DSM-III-R DD, including 14% with MPD.[18] In a 2-year study screening general adult psychiatric inpatients, we found that 20.7% had a DD including 5.4% with MPD[30]: This was a conservative estimate because we did diagnostic interviews only on subjects scoring above 20 on the DES. On the basis of the mean and standard deviation (SD) of DES scores in clinical MPD cases (mean score = 41.4, SD = 20.0),[39] a cutoff of 20 probably resulted in about 15% of the cases of MPD not being assessed diagnostically.

Screening 34 adolescents being assessed at a psychiatric facility we found 12 (35%) with a DD including 6 (17%) with MPD.[38] Finally, in a nonclinical but high risk sample, we found DDs in 35% of 20 prostitutes including 5% with MPD, and DD in 50% of 20 exotic dancers including 35% with MPD.[31]

Studies using the DES and DDIS have detected high rates of DDs in clinical populations but have not determined their prevalence in the general population.

THE GENERAL POPULATION PREVALENCE STUDY

Phase One

In 1989, two colleagues and I conducted the first general population survey for dissociation using the DES.[37] The project involved a random sample of the general population age 18 and older in the city of Winnipeg, a midwestern Canadian city of 650,000 people. The sample was a stratified cluster sample and included 1055 respondents. The sampling procedure and demographic characteristics of the respondents who completed the DES are described elsewhere.[37]

The findings of this first phase of the project were that DES scores do not differ between men and women throughout the life cycle, nor do DES scores correlate significantly with other demographic variables including income, education, religion, number of children in the household, or employment history. DES scores do decline significantly with age in both sexes, however, on a curve similar to that for hypnotizability. The mean DES score in the general population is 10.8 (SD = 10.1) and the median score is 7.0. The curve of DES scores in the general population is shown in Figure 1.

Looking at cutoff scores, 8.4% of the general population scores

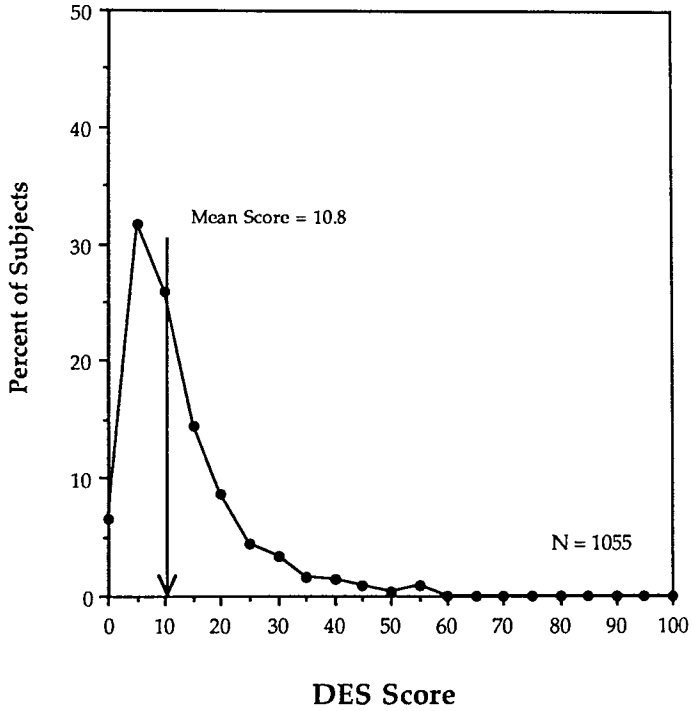

Figure 1. Frequency distribution of DES scores in a random sample of the general population.

above 20 on the DES and 5.0% scores above 30: These figures suggest that the DDs may have a prevalence of 5% to 10% in the general population. In a second article we report a principal components analysis for the DES on the basis of this general population sample.[36] The DES has three factors based on this analysis. The first, which we call *absorption/imaginative involvement*, consists of common benign experiences. The second and third factors consist of a smaller number of much rarer experiences. We call these factors *activities of dissociated states* and *depersonalization/derealization.*

Phase Two

In the second phase of the study, conducted in 1989 and 1990, we did follow-up DDIS interviews with as many of the 1055 respondents as possible.[4] Interviewers conducting the DDIS interviews were blind to all findings from phase one, and none had prior clinical experience with MPD. Four hundred and fifty-four DDIS interviews have been completed in phase two. Of these individuals, 11.2% had one or more DDs including 3.1% with MPD.

The lifetime prevalence of major depressive episode in the sample was 21.1%, of borderline personality disorder (BPD) as defined by DSM-III-R 2.9%, of substance abuse 5.1%, and there were no cases of somatization disorder. These are the first general population prevalence data on both the DDs and BPD. The prevalence of somatization disorder in the general population established using the DIS is 0.1%: Our findings are consistent with accepted prevalences for somatization disorder, low for substance abuse, and high for major depressive episode.[16] Although affective disorders as a group are more common, major depressive episode had a prevalence range of 3.7% to 6.7% in the Epidemiological Catchment Area program.[16] The prevalence rates for each of the diagnoses made by the DDIS are shown in Table 1.

Out of the 454 respondents, 7.0% reported that they had been physically abused and 8.8% reported that they had been sexually abused prior to age 18; and 12.6% reported experiencing one or both forms of childhood trauma.

It was apparent from visual inspection of the data that most of the MPD cases in the general population were radically different from clinical MPD patients. These people often did not report abuse histories and often reported experiencing little psychopathology. They had

Table 1. *General Population Data: Prevalence of Dissociative Disorders*
N = 454

DIAGNOSIS	% OF SUBJECTS POSITIVE
Psychogenic amnesia	7.0
MPD	3.1
Depersonalization disorder	2.4
Psychogenic fugue	0.2
DDNOS	0.2
Dissociative disorder of some type	11.2

low DES scores (only one scored above 20). By reviewing the DDIS profile of each person positive for MPD I identified six individuals who appeared to have pathologic posttraumatic MPD, which was 1.3% of the entire sample.

These six individuals had abuse histories and substantial amounts of symptomatology. For instance, two met criteria for BPD and four had had a major depressive episode. Although they were clearly more symptomatic than the eight individuals positive for MPD who did not report childhood abuse, they were not as disturbed as clinically diagnosed MPD patients. Eight cases (1.8% of the entire sample) were possible false-positive diagnoses of MPD in individuals who did not report childhood trauma or extensive symptomatology.

IMPLICATIONS OF THE PREVALENCE STUDY

Heterogeneity of Individuals Meeting DSM-III-R Criteria for MPD

Although the study yielded only a small sample of 14 individuals positive for MPD, the findings raise a number of issues.

How should we think about the eight individuals who felt they had distinct personality states, but who did not appear to have clinical MPD? The first possibility is that the DDIS is not valid in nonclinical populations: These eight individuals may have DDNOS or no DD. In the absence of blind validation studies, all conclusions must be tentative.

The second possibility is that there is no problem with the DDIS, but instead with the DSM-III-R criteria: Perhaps the DDIS reflects the true prevalence of DSM-III-R MPD in the general population, but the DSM-III-R criteria yield false positives. Third, several of the eight apparently atraumatic individuals may be amnesic for abuse they experienced and unaware of their amnesia. Some of these individuals may be in a period of quiescence or remission, may have had more florid MPD in the past, or may develop overt MPD in the future if subjected to enough stress.

Another possibility is that multiplicity exists in a nonpathologic endogenous form in the general population. About 2% of people may be natural multiples who do not have dysfunctional posttraumatic MPD. They may simply have a highly dissociative psychic organization. If subjected to child abuse, these individuals would have developed clinical MPD with all its symptoms, self-destructiveness, and dysfunctional amnesia. The threshold for development of pathologic MPD in response to trauma is presumably low in such individuals, if they exist.

DSM-III-R criteria function well in clinical populations to differentiate MPD from other diagnostic groups[32,33]; however it appears that more complex criteria are required to differentiate pathologic MPD with numerous personality states, complicated amnesia barriers, and severe trauma histories from individuals with nonpathologic atraumatic multiplicity.

The existence of mild, nonpathologic variants of MPD in the gen-

eral population is consistent with the findings for all other forms of mental disorder. Simply having distinct personality states that feel subjectively like separate people may not in itself be a mental illness. This may be true even if the personality states have separate names and converse out loud with each other inside the person's head. The DSM-III-R criteria for MPD do not make this distinction between psychiatric disorder and normal psychic organization. It is likely that the 14 individuals positive for MPD in the study have provided preliminary information about a heterogeneous group of people, some with disorders of varying etiology, and some with no psychiatric disorder.

A final consideration is that there may be something to the iatrogenesis model of MPD. Because the 14 MPD cases detected in the general population are all less symptomatic than the average clinically diagnosed MPD patient, it is possible that the process of entry into the mental health system and eventual diagnosis of MPD results in amplification of symptoms. If this occurs, it is very different from de novo creation of MPD through iatrogenic influence. Countertherapeutic amplification of symptoms may result from too vigorous a pursuit of abuse memories or too much direct encouragement of separateness of personalities. Alternatively, the most complex and therapeutically difficult forms of MPD, with which specialists are familiar clinically, may have a prevalence no greater than about 1 in 500 in the general population. A sample size of thousands of respondents might be required to resolve these issues. (See also Kluft's presentations on MPDs in this issue.)

Speculation on the Worldwide Prevalence of Chronic Complex DDs

Complex dysfunctional posttraumatic MPD requiring specific psychotherapy appears to affect about 1% of the general population in the city of Winnipeg. There is no reason to believe that the rate for North America as a whole is lower than this, and it is likely to be higher in the ghettoes of large cities.

Complex chronic DDs similar to MPD may be more common than 1% in certain populations. These include, by way of example, children of inner city drug addicts in North America, adults who were children in Vietnam in the 1960s, participants in child pornography, prostitutes, teenage runaways, imprisoned male sex offenders, highly promiscuous HIV-positive gay males, contemporary Ethiopian children, Cambodian boat people, and contemporary street children in Rio de Janeiro. The phenomenology of the DD surely varies with culture and type of chronic trauma.

Chronic complex DDs resembling MPD may affect over 100 million people worldwide.

FURTHER ANALYSIS OF THE DATA

I will now present other findings from the study and explore some of their implications. Before doing so, I want to highlight the methodo-

logic limitations of the study. No final conclusions can be drawn from the data, although I believe they are generally accurate.

Methodologic Limitations of the Study

The sample of 1055 respondents in phase one of our study is methodologically solid; however the same is not true for those who were interviewed with the DDIS in phase two. Phase two of the project has a number of methodologic limitations. There were many individuals who moved or could not be contacted for structured interview. The validity of the DDIS in nonclinical populations has not been established. There should have been blind clinical interviews done by an independent psychiatrist with all individuals positive for a DD and matched controls. The Structured Clinical Interview for DSM-III-R Dissociative Disorders should have been coadministered to at least the subjects positive for a DD and matched controls, to increase the validity of the findings. All individuals positive for MPD on both structured interviews and blind validation interview should have been interviewed on a nonblind basis by myself with all data available for review.

Finally, on completion of data-gathering in phase two, which will yield about another 75 subjects, we will compare respondents who completed phase two and those who did not complete phase two on demographic variables and DES scores to determine whether the phase two subjects are representative of the entire sample of 1055. In the absence of this analysis, conclusions must be tentative.

Rates of Childhood Trauma in Different Psychiatric Disorders

Previous studies of the rates of childhood trauma in the general population do not include psychiatric diagnostic assessments.[21] Conversely, psychiatric epidemiologic studies do not inquire about child abuse.[28] To my knowledge our study is the first general population survey to inquire about both these aspects of psychopathology. The findings have a number of implications.

Each of the diagnoses made by the DDIS is linked to an elevated rate of childhood trauma compared to that in the overall sample, as shown in Table 2. A second way of looking at these data is to calculate the rates of these diagnoses in abused and nonabused individuals, as shown in Table 3. It is clear that a history of childhood trauma is a major risk factor for development of BPD, depression, and MPD.

Table 2. *General Population Data: Prevalence of Childhood Abuse in Various Diagnostic Categories*
N = 454

DIAGNOSIS	% OF SUBJECTS POSITIVE
Borderline personality disorder (N = 13)	61.5
MPD (N = 14)	42.9
Depression (N = 96)	34.4
Substance abuse (N = 23)	21.7
Overall	12.6

Table 3. *General Population Data: Prevalence of Different Psychiatric Diagnoses Among Individuals with Child Abuse Histories*
N = 454

DIAGNOSIS	ABUSED (N = 57) % OF SUBJECTS POSITIVE	NOT ABUSED (N = 397) % OF SUBJECTS POSITIVE
Borderline personality disorder	61.5	1.2
MPD	10.5	2.0
Depression	57.9	15.9
Substance abuse	21.7	4.5

BPD in the general population usually occurs in adults who have been abused as children. This is consistent with the high rates of childhood trauma found in clinical series of borderlines.[6,11,21,23,54,56] These studies of clinical borderlines have all appeared in the last 2 years, and suggest that borderline personality is a posttraumatic disorder. If this idea were accepted, it would mean a major reconceptualization of the disorder.

The relationship between MPD and BPD has been a subject of controversy.[19] Two studies have shown that about two thirds of clinically diagnosed MPD patients also meet criteria for BPD.[12,41] If both diagnoses are long-term consequences of childhood trauma, they would be expected to overlap extensively.

A large group of individuals who have experienced a clinical depression have been abused as children. This fact should be borne in mind in studies of biologic markers, genetics, pathophysiology, and treatment response. It is possible that the abused subgroup of unipolar mood disorder has a distinct pattern of family transmission and response to medication. If this is correct, exclusion of subjects with childhood trauma histories might yield cleaner results in clinical trials of antidepressants, with a higher medication response rate and lower placebo response rate. This would be the case if depressed individuals with childhood trauma histories have developed biologic dysregulations that respond less well to antidepressants and/or are more placebo-reactive.

It is possible that the transmission of antisocial personality disorder, BPD, MPD substance abuse, unipolar mood disorder, and somatization disorder are all linked to each other by childhood trauma.[34,46] Loewenstein[20] has pointed out that attention deficit disorder may be diagnosed in the children of such families, and Walker and colleagues[53] noted a strong relationship between depression, childhood sexual abuse, and nonorganic pelvic pain in a cohort of young women.

Perhaps all these diagnoses, in some pedigrees, are epiphenomena of the child abuse passed on from generation to generation. Perhaps the distinction between traumatic and atraumatic forms of psychopathology could be made throughout psychiatry. Perhaps, as Bessel van der Kolk[52] has argued, many biologic findings in psychiatry are related

more to childhood trauma than to constitutional biologic variables. These speculations point to fertile areas of future research.

The Nature of Schneiderian Symptoms of Schizophrenia

Kurt Schneider[49] originally stated that his 11 first rank symptoms are pathognomonic of schizophrenia. Three studies have shown that Schneiderian symptoms are highly characteristic of MPD.[15,40,44] In fact, they are more common in MPD than in schizophrenia and cluster together with other groups of dissociative symptoms in clinical populations.[18,29,30–33, 38,41] Yet the majority view in psychiatry today is that Schneiderian symptoms, although not pathognomonic of schizophrenia, are characteristic of disorders presumed to be biomedical brain diseases, including schizophrenia, mania, delirium, atypical psychoses, and psychotic depression.

MPD is potentially a major anomaly in psychiatry, because the Schneiderian symptoms of MPD patients are clearly dissociative and posttraumatic in nature and can often be treated to long-term remission with psychotherapy. Although it might be argued that the Schneiderian symptoms of MPD patients are qualitatively different from those of schizophrenics, the fact that MPD patients are frequently misdiagnosed as schizophrenic[40,42] implies that the distinctions are not always obvious. We lack good data demonstrating whether or not there is a reliable qualitative difference between the Schneiderian symptoms of psychoses and those of DDs.

What do our general population data say about the nature of Schneiderian symptoms? As shown in Table 4, a stepwise regression analysis using Schneiderian symptoms as the criterion variable suggests that they are dissociative in nature and related to childhood trauma. If this finding is replicated in a variety of populations using a variety of measures, it will necessitate a revision of our thinking about "psychosis." Perhaps the positive symptoms of schizophrenia cannot necessarily be attributed to biologic disease of the brain, are not specific to schizophrenia, and should not be the foundation of the diagnostic criteria for schizophrenia. Coadministration of the DIS section for schizophrenia in future studies using the DES and DDIS will address these issues.

Table 4. *General Population Data: Stepwise Regression Analysis Criterion Variable = Schneiderian Symptoms*
N = 454

PREDICTOR VARIABLE	BETA WEIGHT	F RATIO	P VALUE
Secondary features of MPD	0.26	32.1	.00001
Borderline criteria	0.19	17.0	.00001
Number of positive amnesia items	0.17	18.4	.00001
ESP/paranormal experiences	0.16	13.8	.0002
Trance states	0.14	13.6	.0003
Physical and/or sexual abuse	0.16	9.2	.003

These speculations illustrate the potential impact of MPD on psychiatry, once it is accepted as a legitimate diagnosis as common in the general population as schizophrenia. I have included them to stimulate thought and further inquiry, not as definitive answers to complex problems.

CONCLUSION

The DDs are the subject of serious scientific study. Our findings, which require replication, indicate that MPD is a common form of major mental illness: The DDs as a group are as common as the anxiety and affective disorders. MPD is the only form of severe mental illness for which there is an understanding of etiology that leads directly to a detailed understanding of phenomenology, in turn to the details of therapy,[24,29] and finally to the possibility of cure in a good proportion of cases. All these assertions require more documentation before they can be accepted by the mental health field as a whole. For a comprehensive discussion of psychogenic fugue and psychogenic amnesia, which I have not focused on here, I refer the reader to Loewenstein's review.[19] Other contributors to this issue provide more detailed discussion of some of the areas I have touched on here.

The fact that DDs are common in North America cannot be regarded as rigorously demonstrated. Hopefully, confirmatory data demonstrating that the findings from our study are accurate will become available in the near future.

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