

DISSOCIATION, DISTRESS AND FAMILY FUNCTION

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ABSTRACT

Studies of factors related to high utilization of medical services have not included Dissociation. This study examined relationships between dissociation, psychological distress, family function and medical utilization of 100 adult family medicine outpatients drawn from two urban residency centers. Results showed a strong positive correlation between dissociation and psychological distress; and a strong negative correlation between dissociation and family function. Dissociation and psychological distress were positively related and family function was negatively related to the frequency of reported physician office visits in the last year. Subjects who scored above the sample median on a quantitative measure of dissociation reported significantly more symptoms of psychological distress and family dysfunction than subjects who scored below the median. The association of dissociative symptoms, psychological distress and family function persisted after controlling for the effects of age, gender, race, marital status, employment status, education and income. Adult family medicine outpatients who report a high level of psychological distress and family dysfunction should be screened for dissociative pathology.

INTRODUCTION

Dissociation is a lack of the normal integration of thoughts, feelings, and experiences into the stream of consciousness and memory (Bernstein & Putnam, 1986). Examples of dissociation from everyday life include daydreaming, the "tuning out" of conversations, and "highway hypnosis." Dissociative experiences have been argued to have adaptive value and exist on a continuum, becoming maladaptive only when they exceed certain limits in intensity or frequency, or occur in inappropriate contexts (Ludwig, 1983). Dissociation thus occurs in both a nonpathological form—the minor dissociations of everyday life, such as daydreaming—and major pathological forms, such as fugue episodes (Bernstein & Putnam, 1986; Archibald & Taddenham, 1965; Putnam, 1985).

Several specific dissociative disorders have been identified and diagnostic criteria established (American Psychiatric

Association, 1987). In addition, the contribution of the dissociative process to other disorders is being actively investigated (Bernstein & Putnam, 1986). The existence of chronic dissociative pathology is now being recognized, either as a primary disorder (such as multiple personality disorder) or as a major pathophysiological process contributing to other disorders (such as posttraumatic stress disorder, anxiety disorder, somatoform disorder, and borderline personality disorder) (Chu & Dill, 1990). The dissociative process is also receiving attention in research into the psychophysiological mechanisms of psychosomatic phenomena (Putnam, 1989).

Under-recognition of dissociative disorders has resulted in delayed diagnosis and treatment, thus imposing burdensome emotional and fiscal costs on both the afflicted individuals and on society (Kluft, 1987). Researchers estimate the prevalence of dissociative disorders to be as common as the anxiety and affective disorders (Ross, 1991). A distinctly transgenerational influence has been noted in families with dissociative pathology (Allison, 1974; Braun, 1985; Greaves, 1980; Saltman & Solomon, 1982). Family dysfunction, often in the form of abuse, is believed by clinicians to serve as one precipitating factor in the development of dissociative pathology (Braun, 1985). Early recognition by family physicians could therefore greatly enhance the chances of correct diagnosis and early treatment. This has important implications as data from childhood cases of dissociative disorder suggest that the earlier the condition is diagnosed, the more readily and rapidly it responds to treatment (Kluft, 1985).

Because of the disturbing quality of dissociative experiences, many patients may deny them or are secretive of them. For example, Coons, Bowman and Milstein (1988) reported that 50 patients with MPD averaged 7.1 years between their first psychiatric treatment and their correct diagnosis. The mean number of previous diagnoses was 2.3, with the most common previous diagnoses being major depression (42%), drug abuse or dependence (28%) and alcohol abuse or dependence (28%).

The prevalence of patients with dissociative pathology seeking treatment from family physicians has yet to be explored. Under-recognition of psychological distress in primary care settings has been attributed to patients presenting with somatic symptoms, requiring a high index of suspicion and the use of sensitive screening techniques for detection (Prestidge & Lake, 1987; Goldberg, 1992). Kluft (1985) reported that patients with MPD also suffer with various manifestations of

psychological distress, including conversion symptoms, pseudo-seizures, sleep disorders, panic attacks, anorexia, and unexplained pain or somatic complaints such as gastrointestinal or cardiac problems. Since patients routinely consult family physicians for treatment of these disorders, knowledge of the prevalence of dissociative pathology in primary care settings and the development of sensitive screening procedures may enhance family physicians efforts to correctly diagnose and refer patients with dissociative disorders for appropriate treatment, thus avoiding years of unnecessary suffering and inappropriate utilization of medical services.

The purpose of the present study is to examine the relationship between dissociation, symptoms of psychological distress, family function and patients' utilization of medical services. Three hypotheses were tested: (1) That dissociation is positively related to psychological distress; (b) That dissociation is negatively related to family function; and (3) That dissociation is positively related to the reported frequency of office visits.

METHODS

The study was conducted at two urban family medicine residency centers, each staffed by six residents in each postgraduate year in addition to board-certified family physicians, family therapists, and family nurse practitioners. Data collection took six months to complete since the research assistants were only available one day a week. All adult patients who entered the waiting room on a day a research assistant was available from October, 1989 to March, 1990 were approached by a research assistant who explained the study, obtained consent, and gave them a brief questionnaire. The questionnaire included a demographics checklist, a Dissociative Experiences Scale (DES; Bernstein & Putnam, 1986), a Symptom Checklist-90-Revised (Derogatis, 1975), and a Family APGAR (Smilkstein, 1988).

The Dissociative Experiences Scale (DES) is a brief, 28-item, self-report inventory of a wide range of dissociative experiences. The DES was developed to offer a means to reliably measure dissociation in normal and clinical populations. The DES is self-administered and asks the respondent to indicate, by marking on a 100-mm-line visual analogue scale, the frequency with which certain specific dissociative experiences

occur. Psychometric data on the DES indicate that summary scores are temporally stable and successfully discriminate patients with dissociative disorders from normals and other pathological groups (Bernstein & Putnam, 1986; Ross, Norton & Anderson, 1988). The instrument has high test-retest reliability, excellent split-half reliability, and good criterion-referenced validity (Bernstein & Putnam, 1986).

The SCL-90-R (Derogatis, 1975) is a multi-dimensional self-report symptom inventory designed to measure symptomatic psychological distress. Scores reflect psychopathology in terms of nine primary symptom dimensions and three global indices of distress. The nine primary symptom dimensions include Somatization, Obsessive-Compulsive, Interpersonal Sensitivity, Depression, Anxiety, Hostility, Phobic Anxiety, Paranoid Ideation, and Psychoticism. The three global indices, the General Severity Index, the Positive

TABLE 1
Frequency Distribution of Dissociative Experiences Scale (DES) Scores
of 100 Family Medicine Outpatients

DES	f	DES	f	DES	f
0 - 5	37	20 - 25	3	40 - 45	2
5-10	23	25 - 30	3	45 - 50	0
10-15	15	30 - 35	2	50 - 55	0
15-20	12	35 - 40	1	>55	2

TABLE 2
Descriptive Statistics and Pearson Correlation Coefficients for Dissociative Experiences Scale (DES), the Symptom Checklist 90-Revised (SCL-90-R), the Family APGAR (FAPGAR) and the Number of Physician Office Visits Reported in the Past Year

Variable	1	2	3	x	sd
1. DES				11.06	11.82
2. SCL-90-R	.65***			58.95	49.48
3. FAPGAR	-.33 ***	-.59 ***		14.17	5.36
4. Office visits	.49 ***	.47 ***	-.35 ***	8.96	22.08

***=p<.001

TABLE 3
Differences in Family APGAR, Office Visits and SCL-90-R Subscales Between Subjects
Who Scored Above and Below the Median DES Score

Dependent variables	DES<7.67 (N=50)		DES>7.67 (N=50)		F
	X	sd	X	sd	
Family APGAR**	15.6	4.9	12.8	5.5	7.38
Office visits past year*	5.8	9.1	12.4	30.3	4.91
SCL-90-Scales					
Global Severity Index***	37.2	35.0	44.0	40.0	30.25
Positive Symptom Index	44.2	24.1	43.8	43.8	0.22
Positive Symptom Total***	21.5	14.5	44.0	21.0	5.90
Somatization**	51.0	14.9	59.8	15.3	8.32
Depression***	50.6	16.6	60.9	12.1	12.70
Anxiety***	38.6	25.1	54.8	18.5	13.48
Phobic Anxiety***	15.2	26.0	38.3	30.7	16.56
Interpersonal Sensitivity***	42.1	24.8	59.2	17.3	16.08
Psychoticism**	33.7	29.4	57.5	22.8	20.52
Obsessive-Compulsive***	41.6	23.1	59.8	12.0	24.64
Hostility***	38.0	25.9	55.0	19.0	14.79
Paranoid Ideation***	29.0	28.7	54.3	22.1	24.34

* $p < .05$

** $p < .01$

*** $p < .001$

Note: These statistically significant differences remained after controlling for the effects of age, gender, race, marital status, employment status, education, and income.

Symptom Total and the Positive Symptom Distress Index, represent summary measures of psychological disorder that, although correlated, have been shown to display distinct aspects of psychopathology. The General Severity Index (GSI) combines information on numbers of symptoms and intensity of distress, while the Positive Symptom Total (PST) reflects only the number of symptoms endorsed. The Positive Symptom Distress Index (PSDI) is a pure intensity measure, adjusted for number of symptoms present. Each item of the SCL-90-R represents distress in terms of a discrete 5-point scale ranging from not at all (0) to extremely (4). Extensive non-patient and psychiatric outpatient norms are available with profiles of family practice patients falling approximately 1.25 standard deviations above nonpatients and one standard deviation below psychiatric outpatients in one study (Snyder, Lynch, Derogatis & Gruss, 1980).

The Family APGAR is a five item questionnaire designed to obtain a family member's satisfaction with family function. The five components of family function considered in the Family APGAR are: Adaptation, Partnership, Growth, Affection, and Resolve. Each item has a discrete 5-point scale ranging from "Never" (0 points) to "Always" (4 points). Studies with college students as subjects were used to establish the scale's reliability (Smilkstein, Ashworth & Montano, 1982). Subsequent studies with patients in clinic settings, prenatal clinics and schools have confirmed the scale's reliability and established its validity (Smilkstein, 1988).

Relationships among the study variables were analyzed by a multivariate procedure yielding Pearson correlation coefficients and descriptive statistics. An ANCOVA (Analysis of Covariance) were used to compare subjects with dissociation scores above and below the median for the sample with respect to psychological distress, family function and reported office visits. These analyses controlled for the effects of age, gender, race, marital status, employment status, education and income. Analyses were performed using the CORR and GLM procedures in the mainframe version of SAS (SAS Institute, 1988).

RESULTS

Of the 100 subjects, 82 were women, 34 were Afro-American, 50 were married, 56 were employed full-time, and 71 were high school graduates. Subjects ranged in age from 18 to 74 with a mean age of 36.55 years (s.d. 12.61).

The distribution of DES scores is presented in Table 1. The scores range from a low of 0.14 to a high of 70.18. The median DES score was 7.67. A DES cut-off score of 55 (out of a possible 100) maximizes the percentage of correctly classified patients with dissociative disorders (87%) while minimizing the false positive (2%) and false negative (11%) error rates (Frischholz et al., 1990). Two subjects' DES scores were over 55.

Description statistics and Pearson correlation coefficients for the Dissociative Experiences Scale (DES), the Symptom Checklist-90-Revised (SCL-90-R), and the Family APGAR (FAPGAR) are listed in Table 2. Results showed a strong positive correlation between frequency of dissociative experiences and symptoms of psychological distress; and a strong

negative correlation between the frequency of dissociative experiences and of family function. Dissociative experiences, psychological distress and family function were also related to the frequency of reported office visits in the last year.

ANCOVA results are summarized in Table 3. The means of several dependent variables were compared between subjects with DES scores equal to or below the median and those above the median. Statistically significant differences between the two groups were found for Family APGAR scores and most SCL 90-R subscales.

DISCUSSION

Dissociative symptoms were found in this study to be strongly related to measures of psychological distress, family function and medical care utilization. These results suggest that family medicine patients who scored above the study median on the DES (7.67) suffer from more psychological distress and have fewer family resources for coping than patients who scored below the study median. The frequency of dissociative symptoms was also found to be positively associated with patient reports of their frequency of medical office visits.

These data are consistent with previous investigations in that the majority of patients reported only minor non-pathological frequencies of dissociative experiences. The median DES score of 7.67 lies among median DES scores found in other surveys of normal adults (DES=4.38; DES=4.9; Bernstein & Putnam, 1986; Ross et al., 1988), phobics (DES=6.04; Bernstein & Putnam, 1986), college students (DES=7.9; Ross, Norton, and Anderson, 1988) and women in an inpatient psychiatric facility (DES=14.2; Chu & Dill, 1990). There may be a higher incidence of dissociative experiences and dissociative pathology among family medicine outpatients than the normal population because patients with dissociative pathology first consult family physicians for symptomatic treatment, a pattern described by Kluft (1985).

These data also demonstrate positive association between dissociation and symptoms of psychological distress, such as depression and anxiety. This association includes somatization symptoms which can mask psychiatric disorders. The symptoms on the Somatic dimension of the SCL-90-R include headaches, faintness or dizziness, pains in heart and chest, muscle soreness, nausea or upset stomach, and numbness or tingling of body parts. These symptoms are often the focus of treatment in primary care settings and are similar to those reported by patients with dissociative pathology in other studies (Kluft, 1985; Coons, 1988). If evidence concerning the link between dissociative disorders and unexplained somatic symptoms continues to accumulate, family physicians may need to consider dissociative disorder as a possible diagnosis when evaluating patients with these complaints.

An negative association between family function and dissociation was supported in this family medicine outpatient sample. In the childhood home situations of patients with dissociative pathology, extreme inconsistency in parental behavior and contradictory expectations of the child by the parents have been repeatedly identified in the literature (Allison, 1974; Greaves, 1980; Saltman & Solomon, 1982;

Coons, 1988). Screening for family dysfunction in primary care settings using the family APGAR may help physicians focus their efforts in identifying patients with dissociative disorders.

The association between dissociation, psychological distress, family function and reported office visits by subjects found in this study supports the notion that patients who experience high levels of dissociation and psychological distress and/or poor family function are prone to be high utilizers of medical services. A major weakness of this study is that patients' own estimates of their frequency of physician office visits was used as a measure of medical utilization. More objective measures of medical utilization might involve chart audits of information such as the number of visits each subject made to the clinic during the past year, the number of referrals to specialists, the number of prescriptions written and/or the number of lab tests ordered. However, the finding is similar to those of other studies that have linked psychological distress and/or family function to medical utilization (Smilkstein, 1988; Smilkstein, Ashworth, & Montano, 1982; Widmer, Cadoret, & North, 1980; Wells et al., 1989).

While generalization is limited because the sample is not random and used only volunteers at two residency training programs, these results suggest that one of 50 family medicine outpatients may suffer from significant dissociative pathology. This finding deserves study, and if borne out by further research, has major implications for the routine practice of family medicine. Since dissociative disorders are highly treatable if recognized, efforts to screen for dissociative disorders in primary care settings may help identify patients early in their disorder, possibly years before they come to the attention of mental health specialists. Family physicians are in the position to make a major contribution to the psychological welfare of patients with unrecognized dissociative disorders.

Dissociation is thus an issue for both psychiatry and primary care medicine. Future research in dissociative disorders needs to include primary care centers to accurately assess prevalence, improve screening techniques, and assess the impact of dissociative symptoms on medical utilization. The contribution of dissociative pathology to other disorders, such as somatization disorder, may be best explored in a primary care setting. Primary care centers may be where many patients with undiagnosed dissociative disorders are currently seeking treatment, and where early identification and treatment may be most efficiently offered. ■

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