Are There Differences Between Borderline and Other Personality Disorders?

Georg Toffler and Jiří Modestin

Psychiatrische Universitätsklinik, Bolligenstrasse 111, CH-3072 Bern, Switzerland

Summary. Using the method of blind retrospective evaluation of clinical records, 26 DSM-III borderline and 27 DSM-III nonborderline personality disorders were compared. Apart from the younger age of borderline patients, no really important differences emerged between the groups in the sociodemographic and clinical variables studied. It is possible that differences between borderline and nonborderline personality disorders are limited to the different phenomenology as defined by the respective diagnostic criteria. The borderline diagnosis proves to be a workable tool for further explorations, although its clinical justification remains to be demonstrated.

Key words: Personality disorder – Borderline personality disorder – Psychiatric inpatients

Introduction

In 1980 the term borderline appeared in the DSM-III (APA 1980) for the first time as an official diagnostic category. In spite of its European roots (e.g. Bleuler 1911; Reich 1925; Glover 1932) this diagnostic label is not officially recognized in Europe. It is not included in either the ICD-9 or the draft for the ICD-10 (Mezzich 1986). However, there are borderlines in Great Britain (Kroll et al. 1982), Norway (Dahl 1986), and Switzerland (Modestin et al. 1983). Apart from borderline schizophrenia and allowing for the considerable overlap with affective disorders (Akiskal et al. 1985), the notion of borderline has always been connected with that of personality disorder. It was previously conceptualized to encompass a variety of personality disorder types (Schmideberg 1959; Kernberg 1967), and many psychoanalysts still adhere to such a concept (Kernberg 1985). However, borderline as a distinct individual type of a personality disorder predominates at present and is defined by DSM-III in this way.

Studies, including long-term follow-up comparisons (Plakun et al. 1985; McGlashan 1986), have repeatedly demonstrated that borderline (unstable) personality disorder (BPD) – defined by the DSM-III (APA 1980) or by the Diagnostic Interview for Borderline Patients (DIB) (Kolb and Gunderson 1980) – can satisfactorily be differentiated from schizophrenia and depression with regard to various demographical, phenomenological, and behavioral variables (Gunderson and Kolb 1978; Koenigsberg 1982; Andrulonis and Vogel 1984; Loranger and Tulis 1985). However, it proved to

be more difficult to separate borderline within the personality disorder category; "the most poorly defined border exists between borderline and other personality disorders" (Ellison and Adler 1984). Perry and Klerman (1980) found a significant difference in the mean scores of a Borderline Personality Scale between clinically diagnosed borderline and other personality disorders, but their results were not conclusive as the same data were used for this analysis and the development of the scale. Using DIB, Barrash et al. (1983) successfully discriminated DSM-III BPD from other personality disorders, although, DIB itself belongs to BPD diagnostic instruments and a high concordance between DIB and DSM-III BPD criteria was found (McGlashan 1983a). Sheehy et al. (1980) found several differences between borderline and nonborderline (mainly obsessive-compulsive and immature) personality disorders with regard to psychopathological and behavioral characteristics. These differences, however, mostly reflected those given by the respective DSM-III definitions of the individual disorders. Pope et al. (1983) were not able to distinguish between DSM-III BPD on the one hand, and histrionic and antisocial personality disorders on the other in terms of the phenomenology, family history, treatment response, and 4 to 7 year long-term outcome. In fact, 23 of their 27 female and 3 of their 6 male BPD patients also fulfilled criteria for histrionic and antisocial personality disorders. Similar results have been reported by Kroll et al. (1982). Frances et al. (1984) found borderline patients to score higher on the Global Assessment Scale and present worse adaptive functioning (DSM-III axis 5) than other personality disorders, but both groups did not differ significantly from each other on a number of other variables. The functional outcome of DSM-III BPD patients was similar to that of a mixed group of severe neurotic and other personality disorders (McGlashan 1983b). In contrast, the difference between DSM-III BPD and less severe character disorders not meeting the DSM-III BPD criteria has been found by Goldstein (1984). The borderline group, characterized by lack of an integrated self-concept and a particular ego structure, stood out as a distinct middle group when compared to the schizophrenic and character disorder groups. Thus, Goldstein (1984) endorsed the broader psychoanalytic borderline conception, although his character disorder group did not seem to be defined clearly enough. At present, no differentiation between BPD and nonBPD is possible on the grounds of psychopharmacological response (Ellison and Adler 1984).

The present investigation was carried out due to the limited number of existing studies comparing BPD and non BPD. Its goal was to find out whether there are significant dif-

ferences between the groups with regard to a broad spectrum of socio demographic and clinical variables.

Methods

The investigation was initiated in an inpatient admission unit during 1981-1982 (Modestin et al. 1983). A symptom list including the 8 DSM-III BPD items in random order was filled out on the basis of an extended clinical diagnostic interview, by the physicians (psychiatrists in advanced stage of training) responsible for the treatment of each patient. As many BPD items are based on historical data, additional (objective) information from close relatives, referring physicians, etc. was regularly included. The participating physicians were not aware of the purpose of the study and had no expectations regarding the results. All patients admitted to the unit were included in the investigation. Of 437 patients, 51 were reassessed on readmission using the same procedure. Interrater kappa for BPD was 0.72, intrarater kappa was 0.75. Furthermore, ICD-9 diagnoses were made independently in every patient by the chief of the unit, who was blind with respect to the ratings.

The present study focused on 26 patients who all were diagnosed as personality disorder according to the ICD-9 and who all fulfilled the DSM-III BPD diagnostic criteria. Some 27 ICD-9 personality disordered patients not fulfilling the DSM-III BPD criteria were chosen from a larger pool of equally defined patients by a random procedure to constitute a control group. None of the total of 53 patients qualified for the ICD-9 diagnosis of schizophrenia (being much broader than the DSM-III criteria) or organic psychosis. Only 1 patient was diagnosed as an affective psychosis. Furthermore, in none of these patients were the DSM-III criteria for a schizotypal personality disorder fulfilled. As the relationship between the DSM-III BPD and schizotypal personality disorder is not clear (Spitzer et al. 1979; Siever and Gunderson 1979) we aimed at examining an uncontaminated sample of BPD patients.

The clinical records of these 53 patients were evaluated retrospectively and the patient's lifelong personal history and index hospitalization (1981-1982) were taken into consideration. The clinical records, frequently including various expert psychiatric opinions and extracts from clinical records from other psychiatric institutions, were thoroughly examined for relevant data in a randomized order by one of us (G.T.), who at the time of the scrutiny was blind regarding the allocation of patients to experimental (borderline) and control (nonborderline) groups. The variables we chose to study covered topics of general interest and areas indicated in the literature as particularly important/problematic for BPD patients. If the variables investigated were not clearly determinable (such as sex and age), we tried to define and operationalize them as exactly as possible (e.g., the patient was judged as chronically disabled if he spent more than a half of the previous 5 years in some institution and/or was unable to work). The following variables were studied:

- (1) Demographic data: sex, age, marital status, number of children.
- (2) Social situation: educational level, living and vocational situation at the time of the index admission, social class of the patient and his family of origin, social downward mobility, chronic disability, placement under tutelage.

- (3) Family history: psychiatric disorders requiring treatment and alcohol and drug abuse disorders in first degree relatives, suicide in the family.
- (4) Personal data: foreign born status, parents of different nationality, broken home before the age of 21 years, disturbed family relationships in childhood, number of siblings and sibling rank, born as a twin, neurotic signs in childhood, social adjustment before 25 years of age (judged as disturbed in case of delinquency, and/or vocational difficulties, and/or disability for reliable lasting relationships, and/or difficulties in separating from family of origin).
- (5) Behavioral pathology: alcohol and drug abuse, criminal behavior, aggressive behavior, self-mutilations, leaving hospital without permission, eating disorders.
- (6) Suicidal behavior: number and severity of past suicide attempts, suicidal behavior including suicidal thoughts immediately before and during the index hospitalization.
- (7) Indications of organicity: history of head trauma, epileptic seizures, clinical impression of organicity, EEG, psychological tests.
- (8) Other pathology: psychotic episodes, depressive episodes, somatic condition.
- (9) Life events: number and type of all life events having occurred during the year preceeding index admission.
- (10) Illness-related variables: age at first symptoms, duration of psychiatric illness, number and duration of psychiatric hospitalizations, total time spent in psychiatric hospitals, number of admissions, transfers and discharges during the year preceding index admission, number of all professionals caring for the patient in the last 2 years before the index admission, total time spent in treatment.
- (11) Data concerning index hospitalization and situation of the patient preceding it: reason for index referral, duration of index hospitalization, vocational adjustment before index hospitalization, quality of interpersonal relations before and in the course of index hospitalization, pharmacotherapy during index hospitalization and its success, mode of discharge, global success of index hospitalization.

Alcoholism, drug use disorder, and depression were diagnosed with the help of the Research Diagnostic Criteria for a selected group of functional disorders (Spitzer et al. 1978). Social class was determined using the classification by Moore and Kleining (1960). Suicide attempts were evaluated using the classification of Motto (1965). Life events were investigated and classified according to Paykel et al. (1971, 1975).

Statistical analysis utilized the χ^2 test and exact Fisher test for categorical variables, and the t-test and z-test for continuous variables. In the case of differing results in the t-test and z-test, the Wilcoxon test was performed and considered decisive. All tests were used two-tailed. Because data relevant to individual variables were not obtained in every patient, the number of cases in both groups varied somewhat in each test. All analyses yielding a P value of 0.05 or less were considered statistically significant. Results yielding a P value between 0.05 and 0.1 were also reported.

Results

As Table 1 demonstrates, DSM-III BPD patients were recruited from various ICD-9 personality disorder types. Consequently, DSM-III BPD cannot be equated with any particular ICD-9 personality disorder category.

In Table 2 ICD-9 additional diagnoses given to patients of both groups are presented. There were no important differences between BPD and nonBPD patients regarding additional pathology.

The most pronounced differences between BPD and non-BPD are presented in Table 3. Borderline patients were of a younger age and also fell ill earlier (onset of illness being de-

Table 1. ICD-9 personality disorder types in borderline and nonborderline groups

ICD-9 personality disorder diagnosis		Borderline personality disorder $(n = 26)$	Nonborderline personality disorder $(n = 27)$
301.1	Paranoid	1	0
301.2	Schizoid	2	0
301.4	Anankastic	0	1
301.5	Hysterical	7	4
301.6	Asthenic	1	4
301.7	Sociopathic	2	2
301.8	Other	9	7
301.9	Unspecified	0	2
	Mixed	4	7

Table 2. ICD-9 additional diagnoses in borderline and nonborderline groups

ICD-9 diagnosis		Borderline personality disorder $(n = 26^a)$	Nonborderline personality disorder $(n = 27^a)$
 296	Affective psychosis	0	1 ^b
298	Reactive psychosis	0	1
300	Neurotic disorder	2	5
303	Alcohol dependence	3	3
304	Drug dependence	4	4
305	Alcohol/drug abuse	4	3
308	Acute reaction to stress	1	2
309	Adjustment reaction	9	6
317	Mental retardation	1	1

^a In 8 borderline and 4 nonborderline personality disorders no other ICD-9 diagnosis (but 301) was given

fined in terms of the first contact with medical facilities because of psychiatric problems). Among borderline patients who attempted suicide there seemed to be more repeaters. Borderline patients never made a clinical impression of being organically impaired. They came in contact more frequently with psychiatric institutions in the year preceding index admission and their index hospitalization was less frequently judged as helpful. They more frequently occupied a position of youngest child, and alcohol misuse occurred more frequently in their first degree relatives.

Discussion

The results of our study demonstrate a considerable lack of differences between DSM-III BPD and nonBPD in the population of ICD-9 personality disorders not suffering from organic psychoses, affective psychoses, and schizophrenia. Compared with ICD-9 the DSM-III definition of the general category of personality disorder is only slightly modified; both definitions rely heavily on Schneider's classification (Sass 1986). Only 4 variables were found to differentiate between both groups at the 5% probability level. These differences may easily have emerged by chance, as a total of 106 comparisons were carried out. This could certainly be the case regarding the variable clinical impression of organicity. It was one of the few variables which were not operationalized, and the result was not substantiated by other findings such as history of head trauma, EEG, and psychological tests. On the other hand, the finding of BPD being of a significantly younger age than nonBPD is probably valid. Borderline patients were significantly younger than nonborderline patients in many studies (Akhtar et al. 1986) including the study performed by Spitzer et al. (1979) to validate the DSM-III BPD criteria, and, as Dahl (1985a) concluded, in most borderline samples there were no patients above 40 years of age. As we demonstrated on a larger sample of personality disordered patients (Modestin and Toffler 1985), the occurrence of some DSM-III BPD criteria is age-dependent, particularly for the criterion of identity disturbance. Corresponding to their younger age, borderline patients may indeed contact medical facilities earlier. Borderline patients investigated by Dahl (1985b) contacted the mental health care system for the first time at a comparable mean age of 19-20 years. The tendency of borderline patients to occupy the position of youngest child may again only be a function of their younger age. Other differ-

Table 3. The most pronounced differences between borderline and nonborderline groups

	Borderline personality disorder $(n=26)$	Nonborderline personality disorder $(n = 27)$	Significance
Average age	28.3 ± 6.6	36.0 ± 13.9	P < 0.01
Onset of illness	23.1 ± 7.6	29.4 ± 13.5	P < 0.05
Position of youngest child	9 (35%)	3 (11%)	0.05 < P < 0.1
Number of suicide attempts in suicide attempters	2.7 ± 1.9 $(n = 17 = 65\%)$	1.6 ± 0.9 $(n = 13 = 48\%)$	0.05 < P < 0.1
Clinical impression of organicity	0 (0%)	6 (22%)	P < 0.05
Admission/discharges in the year preceding index admission	3.3 ± 2.8	2.1 ± 1.9	P < 0.05
Index hospitalization judged globally as helpful	14 (54%)	22 (82%)	0.05 < P < 0.1
Alcohol misuse in 1° relatives	13 (50%)	6 (22%)	0.05 < P < 0.1

^b Manic syndrome in a patient with mild mental retardation and hysterical personality disorder

ences we found, although not always reaching the level of statistical significance and questionable regarding the number of comparisons performed, agreed with the findings of other authors. There seemed to be a high number of suicide attempt repeaters in the borderline group; a similar finding was made by Friedman et al. (1983) and Kullgren et al. (1986). This, of course, is not surprising, as suicidal behavior presents a part of a DSM-III BPD definition. Borderline patients were indeed found to have received psychiatric hospital and outpatient treatment more frequently (Skodol et al. 1983) and their relation to psychiatry seems to be as intense and unstable as their interpersonal relations (Kullgren et al. 1986). This relational pattern represents the most important DSM-III BPD diagnostic criterion (Clarkin et al. 1983; Pfohl et al. 1986). Finally, alcohol problems were frequently encountered in BPD relatives; alcoholism runs in families and again, alcohol abuse belongs to DSM-III BPD criteria (Loranger and Tulis 1985).

Could the negative results of this study be due to the method used? On the one hand, retrospecitve evaluation of clinical records is always fraught with inherent problems of lack of data and/or questionnable quality. On the other hand, clinical notes can give information of sufficient reliability and validity if they are properly recorded (Czernansky et al. 1983). Our charts were generally of good quality, although data was occasionally missing. However, the allocation of patients to borderline and non borderline groups occurred quite independently of the recording of the charts, and investigation of the clinical records was performed blind. Furthermore, we do not believe that our negative results would be invalid due to low sensitivity of the investigative method. Using a very similar set of criteria, we found a great number of highly significant differences between schizophrenic, depressive, and alcoholic clinical suicides in the retrospective investigation of our clinical records (Modestin 1986).

Our findings indicate that except for age, there were no really convincing differences between BPD and nonBPD as far as the sociodemographic and clinical variables were concerned. These results, and the negative results reviewed above, do not mean that there are virtually no differences between borderline and nonborderline patients at all, but indicate that these differences are basically limited to the phenomenological and behavioral features with the help of which the BPD is defined. Is introduction of the BPD category into psychiatric practice and use of this diagnostic label justified? In an optimal case the diagnosis represents a designation with etiological, symptomatological, prognostic, and therapeutic implications. There are symptomatological differences between borderline and other personality disorders by definition, and it has been recently demonstrated (Clarkin et al. 1983; Pfohl et al. 1986; Dahl 1986) that it is the criterion of unstable/intense relationships which best differentiates between BPD and nonBPD. The pattern of interpersonal relationships characterized by inability to integrate positive and negative feelings and attitudes in a single relationship, by marked instability and shifts of attitude over time, by pronounced emotional intensity and inadequate idealization on the one hand and devaluation, manipulative quality, and lack of reciprocity on the other, appears as the most characteristic DSM-III BPD criterion with the highest diagnostic efficiency. This interpersonal relational and behavioral pattern has been conceptualized by psychoanalysts as being an expression of an intrapsychic dynamism of splitting (Kernberg 1975; Masterson 1975), a phenomenon requiring special attention and an adequate approach in psychotherapeutic treatment (Kernberg 1975; Adler 1977; Rohde-Dachser 1982). It has also been proposed that it is the special mother-child relationship which might play a decisive role in the etiology of the borderline disorder (Masterson and Rinsley 1975). The prognosis of an untreated borderline disorder was claimed to be characterized by "stable instability" (Schmideberg 1959). Thus, the existence of the borderline diagnosis would seem to be justified. However, many of the psychoanalytic hypotheses are difficult to validate, and, as already mentioned, the psychoanalytic borderline concept frequently encompasses other types of personality disorders. Therefore, at present, the justification of the BPD diagnosis can neither be accepted nor discounted. Today, BPD represents a working diagnosis awaiting its definitive validation.

References

- Adler G (1977) Hospital management of borderline patients and its relation to psychotherapy. In: Hartocollis P (ed) Borderline personality disorders. International Universities Press, New York, pp 307-323
- Akhtar S, Byrne JP, Doghramji K (1986) The demographic profile of borderline personality disorder. J Clin Psychiatry 47:196–198
- Akiskal HS, Chen SE, Davis GC, Puzantian VR, Kashgarian M, Bolinger JM (1985) Borderline: An adjective in search of a noun. J Clin Psychiatry 46:41-48
- American Psychiatric Association (1980) Diagnostic and statistical manual of mental disorders, 3rd edn. American Psychiatric Association, Washington DC
- Andrulonis PA, Vogel NG (1984) Comparison of borderline personality subcategories to schizophrenic and affective disorders. Br J Psychiatry 144:358–363
- Barrash J, Kroll J, Carey K, Sines L (1983) Discriminating borderline disorder from other personality disorders. Arch Gen Psychiatry 40:1297-1302
- Bleuler E (1911) Dementia Praecox oder Gruppe der Schizophrenien. Deuticke, Leipzig Wien
- Clarkin JF, Widiger TA, Frances A, Hurt SW, Gilmore M (1983) Prototypic typology and the borderline personality disorder. J Abnorm Psychol 92:263-275
- Csernansky JG, Yesavage JA, Maloney W, Kaplan J (1983) The treatment response scale: A retrospective method of assessing response to neuroleptics. Am J Psychiatry 140:1210-1213
- Dahl AA (1985a) Diagnosis of the borderline disorders. Psychopathology 18:18–28
- Dahl AA (1985b) Borderline disorders the validity of the diagnostic concept, Psychiatr Dev 2:109-152
- Dahl AA (1986) Some aspects of the DSM-III personality disorders illustrated by a consecutive sample of hospitalized patients. Acta Psychiatr Scand [Suppl 328] 73:61-67
- Ellison JM, Adler DA (1984) Psychopharmacologic approaches to borderline syndromes. Compr Psychiatry 25:255-262
- Frances A, Clarkin JF, Gilmore M, Hurt SW, Brown S (1984) Reliability of criteria for borderline personality disorder: A comparison of DSM-III and the Diagnostic interview for borderline patients. Am J Psychiatry 141:1080–1084
- Friedman RC, Aronoff MS, Clarkin JF, Corn R, Hurt SW (1983) History of suicidal behavior in depressed borderline inpatients. Am J Psychiatry 140:1023-1026
- Glover E (1932) A psycho-analytic approach to the classification of mental disorders. J Ment Sci 78:819-842
- Goldstein WN (1984) Confirmation of the borderline personality within a psychodynamic framework. Psychopathology 17:59-66
- Gunderson JG, Kolb JE (1978) Discriminating features of borderline patients. Am J Psychiatry 135:792-796
- Kernberg OF (1967) Borderline personality organization. J Am Psychoanal Assoc 15:641-685
- Kernberg OF (1975) Borderline conditions and pathological narcissism. Aronson, New York

- Kernberg OF (1985) Neurosis, psychosis, and the borderline states. In Kaplan HI, Sadock BJ (eds) Comprehensive textbook of psychiatry, 4th edn. Williams & Wilkins, Baltimore London, pp 621-630
- Königsberg HW (1982) A comparison of hospitalized and non-hospitalized borderline patients. Am J Psychiatry 139: 1292-1297
- Kolb JE, Gunderson JG (1980) Diagnosing borderline patients with a semi-structured interview. Arch Gen Psychiatry 37:37-41
- Kroll J, Carey K, Sines L, Roth M (1982) Are there borderlines in Britain? A cross-validation of the US findings. Arch Gen Psychiatry 39:60-63
- Kullgren G, Renberg E, Jacobsson L (1986) An empirical study of borderline personality disorder and psychiatric suicides. J Nerv Ment Dis 174:328-331
- Loranger AW, Tulis EH (1985) Familiy history of alcoholism in borderline personality disorder. Arch Gen Psychiatry 42:153-157
- Masterson JF (1975) The splitting defense mechanism of the borderline adolescent: developmental and clinical aspects. In: Mack JE (ed) Borderline states in psychiatry. Grune & Stratton, New York pp 93-101
- Masterson JF, Rinsley DB (1975) The borderline syndrome: the role of the mother in the genesis and psychic structure of the borderline personality. Int J Psychoanal 56:163-177
- McGlashan TH (1983a) The borderline syndrome. I. Testing three diagnostic systems. Arch Gen Psychiatry 40:1311-1318
- McGlashan TH (1983b) The borderline syndrome. II. Is it a variant of schizophrenia or affective disorder? Arch Gen Psychiatry 40: 1319-1323
- McGlashan TH (1986) The Chestnut Lodge follow-up study. III. Long-term outcome of borderline personalities. Arch Gen Psychiatry 43:20-30
- Mezzich JE (1986) New perspectives in the classification of personality and other non-psychotic disorders. Lecture, Third Annual Congress of the Association of European Psychiatrists, Strasbourg, October 24th
- Modestin J (1986) Three different types of clinical suicide. Eur Arch Psychiatr Neurol Sci 236:148–153
- Modestin J, Toffler G (1985) Borderline-Pathologie bei hospitalisierten Persönlichkeitsstörungen. Nervenarzt 56:673-681
- Modestin J, Abrecht I, Tschaggelar W, Hoffmann H (1983) Diagnosing borderline. A contribution to the question of its conceptual validity. Arch Psychiatr Nervenkr 233:359-370
- Moore H, Kleining G (1960) Das soziale Selbstbild der Gesellschaftsschichten in Deutschland. Kölner Z Soziol Sozialpsychiatrie 12: 86-119

- Motto JA (1965) Suicide attempts. Arch Gen Psychiatry 13:516-520 Paykel ES, Prusoff BA, Uhlenhuth EG (1971) Scaling of life events. Arch Gen Psychiatry 25:340-347
- Paykel ES, Prusoff BA, Myers JK (1975) Suicide attempts and recent life events. Arch Gen Psychiatry 32:327-333
- Perry JC, Klerman GL (1980) Clinical features of the borderline personality disorder. Am J Psychiatry 137:165-173
- Pfohl B, Coryell W, Zimmerman W, Stangl D (1986) DSM-III personality disorders: diagnostic overlap and internal consistence of individual DSM-III criteria. Compr Psychiatry 27:21-34
- Plakun EM, Burkhardt PE, Müller JP (1985) 14-year follow-up of borderline and schizotypal personality disorders. Compr Psychiatry 26:448-455
- Pope HG, Jonas JM, Hudson JI, Cohen BM, Gunderson JG (1983) The validity of DSM-III borderline personality disorder. Arch Gen Psychiatry 40:23-30
- Reich W (1925) Der triebhafte Charakter. In: Reich W (Hrsg) Frühe Schriften I. Kiepenheuer & Witsch, Köln, 1977, S 246–340
- Rohde-Dachser C (1982) Diagnostische und behandlungstechnische Probleme im Bereich der sogenannten Ich-Störungen. Psychother Psychosom Med Psychol 32:14-18
- Sass H (1986) Zur Klassifikation der Persönlichkeitsstörungen. Nervenarzt 57:193-203
- Schmideberg M (1959) The borderline patient. In: Arieti S (ed) American handbook of psychiatry, vol 1. Basic Books, New York, pp 398-416
- Sheehy M, Goldsmith L, Charles E (1980) A comparative study of borderline patients in a psychiatric outpatient clinic. Am J Psychiatry 137:1374-1379
- Siever LJ, Gunderson JG (1979) Genetic determinants of borderline conditions. Schizophr Bull 5:59-86
- Skodol AE, Buckley P, Charles E (1983) Is there a characteristic pattern to the treatment history of clinic outpatients with borderline personality? J Nerv Ment Dis 171:405-410
- Spitzer RL, Endicott J, Robins E (1978) Research Diagnostic Criteria (RCD) for a selected group of functional disorders, 3rd edn. New York State Psychiatric Institute, New York
- Spitzer RL, Endicott J, Gibbon M (1979) Crossing the border into borderline personality and borderline schizophrenia: the development of criteria. Arch Gen Psychiatry 36:17-24

Received March 23, 1987