Brit. J. Psychiat. (1973), 123, 685–92

Personality Disorder

Part 1: Record Study*

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A diagnosis of personality disorder is commonly used in psychiatry. It is generally agreed to refer to a disorder manifested by limited adaptive flexibility and certain relatively fixed ineffectual modes of behaviour (Ausubel, 1961; Brody and Lindbergh, 1967; DSM II, 1968; Noyes and Kolb, 1958; Schneider, 1950; Small, Small, Alig and Moore, 1970; Walton, Foulds, Littman and Presly, 1970). However, of twenty or more different types of personality disorders only antisocial personality has been differentiated by rigorous criteria as a distinct diagnostic entity (Robins, 1967; Feighner, Robins, Guze, Woodruff, Winokur and Munoz, 1972; Robins, 1966).

The differentiation of a disorder by standard accepted criteria is important for the study of the natural history of that disorder and for its treatment. The absence of more specific criteria for personality disorders is unexpected, in view of the fact that maladaptive behaviour constitutes an important part of these disorders and is more easily measurable than is emotional disturbance. To arrive at a better understanding of personality disorders it was our purpose to study the hospital records and follow-up the in-patients who had been given a personality disorder diagnosis.

Material and Method

Approximately 7,000 patients were admitted to Renard Hospital, the psychiatric unit of Barnes Hospital and Washington University Medical School, St. Louis, Missouri, in the years 1967 to 1971, of whom 212 (3 per cent) were discharged with a diagnosis of personality disorder other than antisocial personality. The information in these patients' records was checked, utilizing a list containing 370 items. This list of items was based on previous studies (Welner, Liss, Robins and Richardson, 1972; Liss, Welner and Robins, 1972) and on information in the hospital records reviewed for this study, and consisted of (1) 223 psychiatric symptoms and signs, (2) 137 variables relating to personal information, patients' non-psychiatric medical history, details about the patients' marital lives and career, age of onset of psychiatric illness, length of illness, age of first psychiatric and index Renard admission, and (3) 15 other adjectives used to describe the above patients (e.g. 'immature', 'dependent'). For patients who had been admitted more than once the records of all admissions were studied.

The extracted information available to us on each patient was then classified, using the diagnostic criteria designed for research (Feighner, Robins, Guze, Woodruff, Winokur and Munoz, 1972) for the following disorders: depression; mania; schizophrenia; hysteria; alcoholism; antisocial personality; anxiety, phobic, and obsessive-compulsive neuroses; drug dependency; mental retardation; organic brain syndrome; homosexuality. Schizoaffective illness was defined as fulfilling the criteria for either mania, or definite or probable depression, and in addition having both a thought content disorder and a formal thought disorder (Welner, Liss, Robins, Richardson, 1972). These 14 diagnoses will be referred to as the 'clinically established' diagnoses in this study.

Special emphasis was placed on careful collection of non-criteria symptoms, signs, and phrases describing the patients, as it was thought that these might prove important in making a personality disorder diagnosis. How-

* This study was supported in part by NIMH Grants, numbers MH 13002, MH 05804, MH 09247 and MH 23048.

https://doi.org/10.1192/bjp.123.6.685 Published online by Cambridge University Press

ever, for standardization purposes we combined identical or very close terms, e.g. tearful—crying, range attacks—temper tantrums, feeling worthless—self depreciatory, loner—friendless, and the like.

Comparing the information with the diagnostic criteria provided us with two main groups: I. A group of in-patients discharged as personality disorder cases who could not otherwise be diagnosed using the diagnostic criteria. II. A group of in-patients discharged as personality disorder cases who were diagnosed by using the diagnostic criteria.

Results

(A) *The distribution of clinically established psychiatric diagnoses for in-patients discharged with personality disorder diagnoses*

Of the 212 in-patients who were discharged as a personality disorder case, 94 (44 per cent) had too few symptoms to fulfil the criteria for a clinically established diagnosis (Group I). The remaining 118 (56 per cent) of the patients (Group II) had enough symptoms to fulfil the criteria for one or more clinically established diagnoses (Table I).

Table I

The distribution of clinically established psychiatric diagnoses for patients discharged with a diagnosis of personality disorder

Personality disorders	Clinically established diagnoses													
	Alcoholism	Depression	Hysteria	Drug dependency	Anti-social personality	Homosexuality and other sex deviations	Mental retardation	Schizophrenia	Obsessive compulsive neurosis	Phobic neurosis	Anxiety neurosis	Undiagnosed too few symptoms	Undiagnosed too many symptoms	Total patients
Passive aggressive personality ..	4	4	—	1	6	—	1	—	—	—	—	23	0	39
Emotionally unstable personality ..	—	5	—	3	2	1	—	—	—	—	—	14	1	26
Immature personality	1	3	1	—	2	—	—	—	—	—	—	6	—	13
Personality trait disturbance (or disorder)	1	7	1	4	5	—	—	1	—	—	1	18	—	38
Inadequate personality	3	3	—	1	2	—	1	—	1	—	—	6	—	17
Character neurosis	—	—	—	—	—	1	—	—	—	—	—	1	—	2
Schizoid personality	—	5	—	—	—	—	—	2	—	—	—	5	1	13
Mixed personality traits	1	—	—	—	—	—	—	—	—	—	—	—	—	1
Emotional immaturity	—	—	—	2	—	—	1	—	—	—	—	1	—	4
Personality (or character) disorder	3	6	—	1	3	4	—	—	—	—	—	10	—	27
Unspecified personality disorder ..	—	—	—	—	2	—	—	—	—	—	—	3	—	5
Hysterical personality	—	1	6	—	—	—	1	—	—	—	—	3	1	12
Paranoid personality	1	—	—	—	—	—	—	—	—	—	—	1	—	2
Obsessive compulsive personality ..	1	—	—	1	—	—	—	—	—	1	—	—	—	3
Explosive personality	—	1	—	—	—	—	—	—	—	—	—	—	1	2
Cyclothymic personality	1	1	—	—	—	—	—	—	—	—	—	1	—	3
Personality disorder with adolescent rebellious reaction	—	—	—	—	—	—	—	—	—	—	—	1	—	1
Passive dependent personality ..	—	1	—	1	—	—	—	—	—	—	—	1	—	3
Borderline psychotic personality ..	—	—	1	—	—	—	—	—	—	—	—	—	—	1
	16	37	9	14	22	6	4	3	1	1	1	94	4	212

https://doi.org/10.1192/bjp.123.6.685 Published online by Cambridge University Press

(B) *Demographic data*

Table II presents demographic data of the patients diagnosed as personality disorder. There were no significant differences between patients with insufficient symptoms for a clinically established diagnosis (Group I) and those with sufficient symptoms for a clinically established diagnosis (Group II).

(C) *General information on illness and admission to hospital*

The mean number of admissions to a psychiatric hospital, the number of patients having more than one admission, the mean length of illness, and the length of illness of more than two years were greater for patients in Group I than Group II (Table III). An unexpected

TABLE II

Demographic information Groups I and II

	Total N = 212		Personality disorder with insufficient symptoms for a clinically established psychiatric diagnosis N = 94		Personality disorder with sufficient symptoms for a clinically established psychiatric diagnosis N = 118		P
Male	89	42%	39	41%	50	42%	N.S.
Female	123	58%	55	59%	68	58%	N.S.
Black	5	2%	3	3%	2	2%	N.S.
White	207	98%	91	97%	116	98%	N.S.
Marital history unknown	2	1%	2	2%	0	0%	N.S.
Never married	104	49%	45	48%	59	50%	N.S.
Married one or more times	106	50%	47	50%	59	50%	N.S.

TABLE III

General information on illness and hospitalizations

	Total N = 212		Personality disorder with insufficient symptoms for a clinically established diagnosis N = 94		Personality disorder iwth sufficient symptoms for a clinically established diagnosis N = 118		P
Mean age of onset			19·9 ± 9·4		19·9 ± 9·9		N.S.*
Mean age of index admission (= first Barnes)			25·2 ± 10·7		29·3 ± 12·1		<0·02*
Mean length of illness (months)			64·9 ± 70·0		109·5 ± 115·5		<0·01*
Length of illness 2 years or more	153	72%	57	60%	96	81%	<0·01†
Mean number of psychiatric admissions			1·4 ± 1·0		2·5 ± 2·7		<0·001*
Hospitalizations >1	82	34%	21	22%	61	52%	<0·001†

* Student 't-test'. † Chi square.

https://doi.org/10.1192/bjp.123.6.685 Published online by Cambridge University Press

finding was that the age of index admission was significantly lower in patients of Group I than in those of Group II (Table III).

(D) *Psychiatric history not consisting of criteria used for the clinically established psychiatric diagnoses*

The total population for this study presented with a relatively high frequency of certain psychiatric symptoms that were not included in the criteria used for the clinically established diagnoses. When the 212 patients diagnosed as personality disorder were compared with 256 patients in a previous study of undiagnosed psychiatric in-patients (Welner, Liss, Robins and Richardson, 1972), a significantly higher frequency of manipulative behaviour, impulsive behaviour, temper tantrum and severe marital discord was found in the group diagnosed as personality disorder than in the undiagnosed group. (Manipulative behaviour 19 per cent vs. 2 per cent; impulsive behaviour 20 per cent vs. 3 per cent; temper tantrums 16 per cent vs. 7 per cent; and marital discord 78 per cent vs. 50 per cent, $p < \cdot 01$ for each.)

A comparison between Groups I and II of this study shows a significantly higher frequency of impulsive behaviour and temper tantrums for Group I than for Group II (Table IV).

(E) *History of suicide attempts*

A history of suicide attempt was significantly more frequent for the 212 patients diagnosed as personality disorder than for 256 control patients (40 per cent vs. 27 per cent, $p < \cdot 01$). Also, a history of suicide attempt was significantly higher in Group I than Group II (51 per cent vs. 31 per cent, $p < \cdot 01$).

(F) *Reasons for admission to hospital*

Perhaps the most significant differences between patients in Groups I and II were in the

TABLE IV

Psychiatric symptomatology not consisting of criteria used for the clinically established psychiatric diagnoses

Symptoms or description	Total N = 212		Group I Personality disorder with insufficient symptoms for an established psychiatric diagnosis N = 94		Group II Personality disorder with sufficient symptoms for an established psychiatric diagnosis N = 118		P
Manipulative	41	19%	22	23%	19	16%	N.S.
Impulsive	43	20%	26	28%	17	14%	<·05
Immature	21	10%	12	13%	9	8%	N.S.
Temper tantrums	33	16%	21	22%	12	10%	<·05
Marital discord (pending divorce or separation)	83/106	78%	40/47	85%	43/59	73%	N.S.
Rape in childhood	6	3%	4	4%	2	2%	N.S.
Violent behaviour	18	8%	12	13%	6	5%	N.S.
Shy, friendless	20	9%	8	9%	12	10%	N.S.
Broken home (loss of parent by death, divorce before 10)	26	12%	12	13%	14	12%	N.S.
Patient adopted	7	3%	3	3%	4	3%	N.S.
'Dependent'	8	4%	4	4%	4	3%	N.S.
'Hidden hostility'	2	1%	1	1%	1	1%	N.S.
Stuttering	4	2%	1	1%	3	3%	N.S.
Firesetting	1	<1%	0	0%	1	1%	N.S.
Self-mutilation	2	1%	0	0%	2	2%	N.S.
Passive	1	<1%	1	1%	0	0%	N.S.

https://doi.org/10.1192/bjp.123.6.685 Published online by Cambridge University Press

reasons for admission (Table V). The frequency of severe marital discord and of suicide attempts as a cause for admission to the hospital was higher for Group I than for Group II, while psychiatric symptoms as a cause for admission were significantly less frequent (13 per cent) for Group I than Group II (40 per cent).

(G) *In-patients who received, in addition to a personality disorder diagnosis, a 'clinically established' diagnosis by their attending psychiatrist prior to, during or subsequent to their index admission*

There were 72 such patients, of whom 16 (22 per cent) had insufficient symptoms for an

TABLE V

Reasons for admission to hospital for Groups I and II

Reasons for admission to hospital	Total N = 94		Personality disorder with insufficient symptoms for a clinically established psychiatric diagnosis N = 94		Personality disorder with sufficient symptoms for a clinically established psychiatric diagnosis N = 118		P
Marital discord, separation or divorce associated with violent or destructive behaviour or mood disturbance ..	18	8%	14	15%	4	3%	<·01
Boy (girl) friend discord associated with violent or destructive behaviour or mood disturbance	2	1%	2	2%	0	0%	N.S.
Violent behaviour	10	5%	5	5%	5	4%	N.S.
Destructive behaviour	6	3%	3	3%	3	3%	N.S.
Discipline problems—home and school	16	8%	8	9%	8	7%	N.S.
Disturbed behaviour, other	18	8%	4	4%	14	12%	N.S.
Total behaviour disturbance group ..	50	24%	20	21%	30	25%	N.S.
Suicide attempts	52	25%	35	37%	17	14%	<·001
Suicide communication	4	2%	0	0	4	3%	N.S.
Non-psychotic psychiatric symptoms* (depression, excessive drinking, drug abuse)	57	27%	12	13%	45	38%	<·001
Psychotic psychiatric symptoms* (delusions, hallucinations)	1	1%	0	0%	2	2%	N.S.
Total psychiatric symptoms	59	28%	12	13%	47	40%	<·001
Somatic complaints* (abdominal pain, fainting, headaches, vomiting seizures)	11	5%	4	4%	7	6%	N.S.
Phenothiazine side effect	1	<1%	0	0%	1	1%	N.S.
Legal referral	7	3%	2	2%	5	4%	N.S.
Illegitimate pregnancy	1	<1%	1	1%	0	0%	N.S.
Other	4	2%	3	3%	1	1%	N.S.
Unknown	3	1%	1	2%	2	2%	N.S.
Total		100%		100%		100%	

* These specified symptoms include all those recorded.

https://doi.org/10.1192/bjp.123.6.685 Published online by Cambridge University Press

established psychiatric diagnosis. Of the remaining 140 patients, 78 (56 per cent) were undiagnosed because of insufficient symptoms for a clinically established diagnosis ($p < \cdot001$). This significant difference indicates that if a patient receives in addition to a personality disorder diagnosis a clinically established diagnosis by his attending psychiatrist he is less likely to be undiagnosed by our criteria than a patient who receives a personality disorder diagnosis only.

Of the 56 patients (of the 72 in this group) who were diagnosed by the criteria, 42 (75 per cent) had the same diagnosis as the one given by the attending psychiatrist (Table VI).

Discussion

The diagnoses of personality disorders are generally recognized as distinct entities. However, in contrast to most other psychiatric disorders, there seems in this group to be no systematic categorization of symptoms for diagnostic purposes, except for antisocial personality (Robins, 1967). We are also unaware of any systematic classification to distinguish clearly one personality disorder from another. This study was undertaken to collect and categorize in a systematic way clinical information about in-patients given a personality disorder diagnosis and to apply these for a further follow-up study.

In the Department of Psychiatry at Barnes Hospital, Washington University, the diagnosis of personality disorder is uncommon (3 per cent of in-patients). We thought that this fact made this group particularly suitable for our study, because such a diagnosis was not made casually, and the patients might manifest in a conspicuous way common clinical characteristics of personality disorder.

The results showed that the group as a whole differed from a control group in several modes of behaviour. Impulsive and manipulative behaviour, temper tantrums, suicide attempts and severe marital discord were significantly more frequent in the in-patients diagnosed as personality disorder than in a control in-patient group. However, we could not differentiate one personality disorder diagnosis from the others by using symptoms and behaviour patterns; the one exception was hysterical personality, where one-half of the patients presented with multiple somatic and pseudoneurological complaints and a dramatic complex medical history beginning early in life, and therefore were diagnosed, by the criteria we used, as hysteria.

We did find a useful way to divide this population into two groups. Group I consisted of 94 patients who had too few symptoms to fulfil the criteria we used for clinically established diagnosis, and therefore, were assumed by us to be less psychiatrically ill. Group II consisted of 118 patients who had enough symptoms to fulfil the criteria we used for a clinically established diagnosis. Group II was also distinguished from Group I in that a significantly larger proportion of patients in Group II than in Group I had received at another time a

Table VI

Comparison of clinically established diagnoses with clinical diagnoses given by attending psychiatrists to patients with personality disorders

Attending psychiatrists' clinical diagnoses of patients with personality disorder diagnoses	Alcoholism	Depression	Hysteria	Drug dependency	Antisocial personality	Homosexuality	Schizophrenia	Mental retardation	Transsexuality	Anxiety neurosis	Total	
Same as criteria diagnoses ..	7	21	3	4		2	2	2	1		42	(75%)
Depression	2		2	1	3	1				1	10	
Schizophrenia	1	1									2	(25%)
Homosexuality					1		1				2	

https://doi.org/10.1192/bjp.123.6.685 Published online by Cambridge University Press

psychiatric diagnoses agreeing with the clinically established diagnoses we had arrived at by our criteria.

As was expected, patients in Group II had significantly more admissions to hospital and a longer duration of illness than Group I. The two groups had an identical age of onset for psychiatric difficulty (age 20). An unexpected finding was that Group I, whose members were assumed to be less sick, had a younger age of index admission than Group II.

The most striking differences between the two groups was in the reason for admission to hospital. Severe marital discord and suicide attempts were significantly more frequent as a cause in Group I than Group II; whereas psychiatric symptoms as a cause were significantly less frequent in Group I (13 per cent) than Group II (40 per cent).

It may be concluded from this study that Group I, the patients who had no clinically established diagnosis, and who had all the above characteristics (socially disruptive behaviour and limited psychiatric symptomatology), constitute the basis on which in-patients are being diagnosed as having personality disorders. In addition, it may be possible to consider patients in Group II as a combination of clinically established diagnoses and personality disorders.

Summary

The records of 212 in-patients discharged with a diagnosis of personality disorder (other than antisocial personality) were studied. The total group presented with a significantly higher frequency of manipulative behaviour, impulsive behaviour, temper tantrums, suicide attempts, and severe marital discord when compared with a control in-patient population.

Ninety-four patients had too few symptoms to fulfil the criteria we used for a clinically-established diagnosis—Group I. One-hundred and eighteen patients had enough symptoms to fulfil the criteria for one or more clinically established diagnoses—Group II.

Group I had a significantly lower age of index admission, a significantly shorter mean length of illness, and significantly smaller number of psychiatric admissions than Group II. However, the mean age of onset of the illness was the same for the two groups.

When the reasons for admission were studied, the frequency of severe marital discord and suicide attempts as causes was significantly higher in Group I than in Group II, while psychiatric symptoms as causes were significantly less frequent (13 per cent) for Group I than Group II (40 per cent).

It has been shown that if patients, in addition to a personality disorder diagnosis, are given at any time one of the fourteen diagnoses referred to previously as clinically established diagnoses by their treating psychiatrist, then they are significantly less likely to be undiagnosed by our criteria.

There was no evidence of an association between specific symptoms used to describe personality disorders and any particular type of personality disorder. There was no association between personality disorder diagnoses and clinically established diagnoses, except for hysterical personality and hysteria.

References

Ausubel, D. (1961). 'Personality disorder is a disease.' *American Psychologist*, **16**, 69–74.

Brody, E., and Lindbergh, S. (1967). 'Personality disorders: I. Traits and pattern disturbance', in *Comprehensive Textbook of Psychiatry* (Freedman, A., and Kaplan, H.), chap. 25. Baltimore: The Williams and Wilkins Company.

DSM II (1968). *Diagnostics and Statistics Manual of Mental Disorders*. Washington, D.C.: American Psychiatric Association.

Feighner, J., Robins, E., Guze, S., Woodruff, R., Winokur, G., and Munoz, R. (1972). 'Diagnostic criteria for use in psychiatric research.' *Archives of General Psychiatry*, **26**, 57–63.

Liss, J., Welner, A., and Robins, E. (1972). 'Undiagnosed psychiatric patients. Part II: Follow-up study.' *British Journal of Psychiatry*, **121**, 647–51.

Noyes, A., and Kolb, L. (1958). *Modern Clinical Psychiatry* (5th ed.). Philadelphia: The W. B. Sanders Company.

Robins, L. (1966). *Deviant Children Grown Up: A Sociological and Psychiatry Study of Sociopathic Personality*. Baltimore: The Williams and Wilkins Company.

Robins, E. (1967). 'Personality disorders: II. Sociopathic type: anti-social disorders and sexual deviation', in *Comprehensive Textbook of Psychiatry* (eds. Freedman, A., and Kaplan, H.), chap. 26. Baltimore: The Williams and Wilkins Company.

Sargant, W. (1969). 'Physical treatments of anxiety', in *Studies of Anxiety* (ed. M. H. Lader). *British Journal of Psychiatry* Special Publication No. 3.

https://doi.org/10.1192/bjp.123.6.685 Published online by Cambridge University Press

SCHNEIDER, K. (1950). *Psychopathic Personalities* (9th ed.) Vienna. (trans. M. W. Hamilton; 1958, Springfield, Illinois: Charles C. Thomas.)

SMALL, I., SMALL, J., ALIG, V., and MOORE, D. (1970). 'Passive aggressive personality: in search of a syndrome.' *American Journal of Psychiatry*, **126**, 973–81.

WALTON, H., FOULDS, G., LITTMAN, S., and PRESLY, A. (1970). 'Abnormal personality.' *British Journal of Psychiatry*, **116**, 497–510.

WELNER, A., LISS, J., ROBINS, E., and RICHARDSON, H. (1972). 'Undiagnosed psychiatric patients. Part I: Record study.' *British Journal of Psychiatry*, **120**, 315–9.

A synopsis of this paper was published in the March 1973 *Journal*.

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(*Received 30 October 1972*)

https://doi.org/10.1192/bjp.123.6.685 Published online by Cambridge University Press