



SHORT COMMUNICATION

Personality disorders in patients referred to consultation-liaison psychiatry: Characteristics and medical treatment in a large general hospital



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Abstract The association of somatic illness and personality disorders (PD) has important and potentially negative implications for patients. We compare characteristics and treatment variables of 3032 patients with and without PD in a large sample of consultation-liaison (CL) psychiatry patients.

2434 patients had a psychiatric disorder other than a PD, 66 a PD only, and 532 a combination of both. The most frequent combination of disorders on Axis I and II was that of a Cluster-B-PD and substance related disorders. CL-patients with PD were significantly younger, living alone more often, showed better general functioning and had a shorter length of stay.

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Introduction

The increased prevalence of chronic illness leads to higher comorbidity of mental and physical conditions, attaining up to 41–47% in the general hospital.¹ While research on comorbidity increases, there is little study of patients with personality disorders (PD) and somatic illness in consultation-liaison (CL) psychiatry. PD is associated

with reduced quality of life² and more general health problems.³

Small-scale studies indicate that the prevalence of PD in CL-settings varies from 4 to 12% but give little information about functioning or procedural variables.^{4,5}

Therefore, this explorative study describes baseline and process variables of these patients and compares them to those with other psychiatric disorders.

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Methods

We present a retrospective cohort analysis of patients referred to the CL-psychiatry service of Mount Sinai Hospital (tertiary care, 1200 beds, 30,000 annual inpatient admissions during the study period), New York City, between 1988 and 1997, with all patients whose psychiatric consultation was requested by a somatic ward. Since several specialty units (e.g. gerontology, HIV/AIDS) employ their own psychiatrists/psychologists, consultation requests were issued predominantly by general medical or surgical wards. 3032 patients with a diagnosis of Axis-I and/or II of the DSM-III-R or DSM-IV system between the ages of 17 and 65, without private insurance (care provided by private attending physicians), were included.

Patient characteristics including somatic (available for 2848 patients) and psychiatric diagnoses and process data were collected using the MICRO-CARES Questionnaire.⁶ Psychiatric diagnosis was made by the consulting physician

without structured diagnostic interviews, based on clinical interviews only. PD were grouped into three clusters as defined by DSM. The Karnofsky Index (low values meaning high care needs) was used to assess general functioning. Details on variables are provided in the supplement. Variables compared those with psychiatric disorders exclusive of PD, PD only, or both conditions combined. We used multiple regression in a secondary analysis to assess whether a PD diagnosis had an independent impact on LOS (see supplement). Independent variables were chosen based on a priori clinical hypotheses.

Results

2434 (80.3%) patients had a psychiatric disorder without a comorbid PD, 66 (2.2%) a PD only and 532 (17.5%) a combination of both (see Table 1).

The most frequent main diagnoses were organic mental disorders, followed by adjustment-disorders. The share

Table 1 Descriptive analysis of patients with psychiatric disorders on Axis I and/or II ($n = 3032$).

Variable	Axis I $N = 2434$ "A.I"	Axis I and II $N = 532$ "A.I+II"	Axis II $N = 66$ "A.II"	p -value	Missing (n)
Age (years)	43.8 ± 12.5	39.0 ± 11.9	41.9 ± 15.2	.000	0
Gender % male	50.8	55.6	60	.055	18
Lag time (days)	8.8 ± 21.7	6.7 ± 20.5	15.1 ± 53.1	.001 for A.I vs. A.I+II	653
Number of reasons consultee	1.8 ± 1.0	2.1 ± 1.2	2.1 ± 1.3	.000 for A.I vs. A.I+II	0
Number of reasons consultant	2.5 ± 1.4	3.1 ± 1.4	2.3 ± 1.4	.000 for A.I+II vs. all others	0
Living alone %	31.3	41.0	46.6	.000	40
Unemployed %	81.7	85.8	87.9	.038	16
Karnofsky index	60.8 ± 24.2	67.8 ± 21.8	69.9 ± 20.6	.007 for A.I vs. all others	55
LOS (days)	21.6 ± 34.1	15.6 ± 23.6	25.4 ± 60.6	.043 for A.I vs. A.II .001 for A.I vs. A.I+II	653
Follow-up (n)	5.0 ± 6.9	4.3 ± 5.2	4.1 ± 6.7	.082	215
Major psych. treatment last year (% yes)	23.5	31.1	16.0	.001	272
Psychopharm. recommended %	46.3	41.2	16.7	.000	0
Psychometr. test recommended %	5.4	5.2	5.1	.973	55
Non-medical consultation recommended %	28.9	38.3	20.3	.000	77
Ext. information recommended %	62.1	58.6	61.0	.327	64
Behavioral management recommended %	20.1	28.2	22.4	.000	86
Psychological management recommended %	76.5	84.6	77.8	.000	42
Environ. change recommended %	22.3	27.5	15.3	.014	60
AMA possible %	4.7	10.1	10.2		
AMA refused %	6.1	5.8	3.4	.000	114
AMA no issue %	89.2	84.1	86.4		

Values are mean ± SD unless otherwise stated. After Bonferroni-correction for multiple testing, statistical significance is set at $p < .003$. LOS = length of stay. AMA = discharge against medical advice.

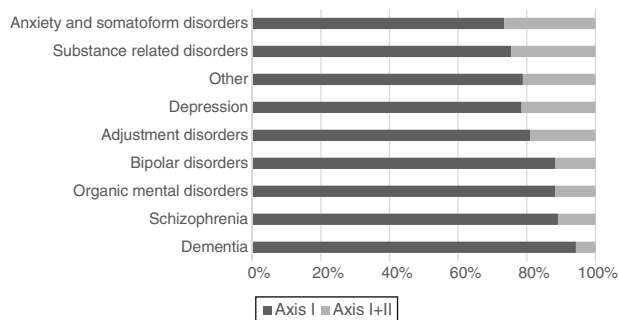


Figure 1 Share of concomitant PD morbidity (Axis II) by main diagnoses for other psychiatric disorders (Axis I) (n = 2966).

of patients with a combined psychiatric disorder varied with respect to the main diagnosis on Axis-I. It was highest in patients diagnosed with anxiety-disorders and lowest in patients with dementia (see Fig. 1).

The PD-cluster with the highest proportion of patients in our sample was Cluster B. The most frequent combination of disorders was that of a Cluster-B-PD and substance-related-disorders (see Table 2).

In terms of somatic morbidity, the share of patients with PD was highest in patients treated for injuries and poisoning and lowest in those treated for neoplasms (see Fig. 2).

CL-patients with PD (either PD alone or comorbid with Axis-I) were significantly younger, lived alone more often and showed higher general functioning than patients without PD. Compared to those without PD, patients with a comorbid condition had a significantly shorter LOS, a shorter lag time and more reasons for the consultation. Additionally, patients with a combined disorder exhibited significantly more psychiatric treatments in the year preceding admission and received more recommendations for non-medical consultations, behavioral management and psychological management, and the consultant more frequently assessed whether discharge against medical advice was possible or not. Psychopharmacological treatment was recommended less frequently.

Multiple regression of LOS showed a significant positive association between age and LOS (see Table 3). The significant and negative association of PD diagnosis and LOS persisted in the regression, independent of PD clusters. Frequent psychiatric treatments preceding admission and high

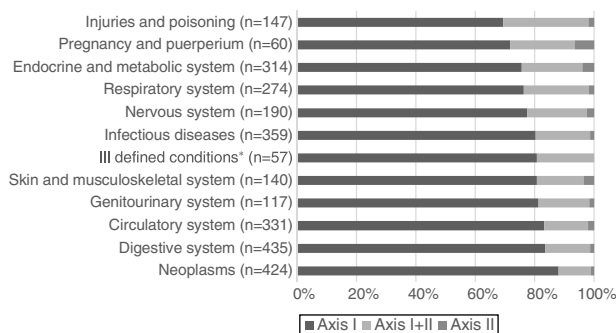


Figure 2 Distribution of somatic main diagnosis and share of psychiatric disorders on Axis I (other disorders) and/or II (PD), by main diagnostic group (n = 2848).

*List of ICD-9 codes 780–799: ‘‘symptoms, signs, and ill-defined conditions’’.

functioning were negatively associated with LOS, as was the year of consultation.

Discussion

To the best of our knowledge, this study is the largest to investigate characteristics and care variables of PD in CL-patients.

Prevalence of PD was 20%, with a small number of patients exhibiting an isolated PD. While the high co-occurrence of PD and other disorders is in accordance with the findings of the Collaborative Longitudinal Personality Disorders Study,⁷ overall, other prevalence estimations on PD in CL-patients are lower.⁸ Prevalence of PD among 541 patients referred to two university hospital liaison services in Brazil was 11 and 12%, respectively.⁵ In 814 inpatients referred to the CL-psychiatry services of two Canadian general hospitals, PD prevalence was 7.6%.⁹ The European Consultation-Liaison Workgroup Collaborative Study described 56 services from 11 countries and reports an even lower mean prevalence of PD, 3.8%.⁴

While it is possible that this variation is due to study settings, it must be considered that diagnosis in our study was based on unstructured clinical interviews. Although recent evidence suggests that structured diagnostic instruments may have higher validity than clinical interviews for predicting subsequent functioning,¹⁰ it remains a challenge to

Table 2 Distribution of diagnoses on Axis I and II (n = 2966).

Diagnosis	PD Cluster A	PD Cluster B	PD Cluster C	No PD	Total
Organic mental disorders	8	46	34	660	748
Adjustment disorders	9	61	51	496	617
Substance related disorders	2	97	42	437	578
Depression	4	31	32	245	312
Other	4	17	15	204	240
Anxiety and somatoform disorders	2	29	20	142	193
Schizophrenia	7	5	6	147	165
Bipolar disorders	0	4	3	53	60
Dementia	0	2	1	50	53
Total	36	292	204	2434	2966

Table 3 Multiple regression of length of stay ($n=2228$).

Variable	Standardized regression coefficient (beta)	<i>p</i> -value
Age	.162	.000
PD diagnosis	-.070	.001
Major psych. treatment last year	-.133	.000
Karnofsky index	-.184	.000
Year of consultation	-.225	.000

Adjusted R^2 : .121.

include such instruments in naturalistic settings such as a busy CL-psychiatric service. Furthermore, the psychiatrist's clinical interview remains the gold standard. The strength of this study, a large sample with a detailed dataset over a large timespan, is linked to limited comparability through the absence of structured diagnostic tools.

Other limitations include the R^2 in our regression, indicating that much of the variation in LOS is linked to data that were not available. Further, our cohort dates back to the 1990s, reducing transferability and generalizability, since practice and populations change over time. However, clinical experience suggests that the main characteristics of patients with PD varied little, even if CL-psychiatry responded to changes in the hospital setting.¹¹ Finally, selection effects must be considered, e.g. concerning the HIV/AIDS-patients who were not consulted by the regular CL-team, and private patients who were consulted by private physicians.

Overall, this study expands the literature and suggests that PD has a relatively high prevalence in the CL-psychiatry setting. Therefore, clinicians and researchers alike should raise their awareness for these patients.

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Conflict of interest

None.

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