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Study of personality disorders and the use of services in the clinical population attended in the mental health network of a community area

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Introduction. Personality disorders (PD) are a growing clinical and health care problem. In Spain, the studies of PD and utilization of the Mental Health Services (MHS) in the clinical population are scant. However, these data are necessary in the planning of MHS for PD.

Method. We studied all the patients attended throughout one year in all the psychiatric departments (n = 2701), and separately in the inpatient (n = 193) and outpatient (n = 2649) psychiatric services. All the patients diagnosed with PD by clinical interview (DSM-IV-TR Criteria) were included. Demographic and clinical variables as well as use of MHS were studied.

Results. The proportion of PD in the population attended was 11% (95% CI: 9.8%-12.2%) and in the inpatient and outpatient psychiatric services 17.6% (95% CI: 12.9%-23.6%) and 10.3% (95% CI: 9.2%-11.5%), respectively. The most representative PD were borderline (25.7%), histrionic (24%) and obsessive-compulsive (6.4%) and 19.6% were Not Otherwise Specified PD. PD accounted for an extensive use of mental health resources (inpatient, outpatient and emergency units). The most comorbid conditions in axis I were affective, anxiety and substance-related disorders.

Conclusions. The study of PD attended in the MHS in a community area by means of clinical evaluation is an economical instrument, which is easily applied and replicated in planning of MHS for PD.

Key words:
Personality disorder. Service utilization. Comorbidity. Community area.

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Estudio de los trastornos de personalidad y de la utilización de servicios en la población clínica atendida en la red de salud mental de un sector sanitario

Introducción. Los trastornos de personalidad (TP) constituyen un problema clínico y asistencial creciente. En España los estudios de los TP y de la utilización de servicios de salud mental (SM) en población clínica son escasos. Sin embargo, estos datos son necesarios para planificar la asistencia de los TP.

Método. Se han estudiado todos los pacientes atendidos durante 1 año en el conjunto de los servicios psiquiátricos (n = 2.701) y por separado en los servicios hospitalarios (n = 193) y ambulatorios (n = 2.649). Se han incluido todos los pacientes diagnosticados de TP mediante entrevista clínica (criterios DSM-IV-TR). Se han investigado variables demográficas, clínicas y uso de servicios de SM.

Resultados. La proporción de TP en el conjunto de la población atendida fue del 11% (IC-95%: 9,8-12,2%) y en los servicios hospitalarios y ambulatorios del 17,6% (IC 95%: 12,9-23,6%) y 10,3% (IC 95%: 9,2-11,5%), respectivamente. Los TP más representados fueron el límite (25,7%), el histriónico (24%) y el obsesivo-compulsivo (6,4%), y el 19,6% fueron TP no especificado. Los TP hicieron una utilización importante de los recursos de salud mental (hospitalarios, ambulatorios y urgencias). Los trastornos del estado de ánimo, de ansiedad y por consumo de sustancias fueron los más comórbidos en el eje I.

Conclusiones. El estudio de los TP atendidos en los servicios de SM de un distrito sanitario mediante evaluación clínica es un instrumento económico, sencillo y reproducible para planificar la asistencia de los TP.

Palabras clave:
Trastorno de personalidad. Utilización de servicios. Comorbilidad. Distrito sanitario.

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INTRODUCTION

Personality disorders (PD) are a clinical and health care problem of increasing complexity, both qualitatively-serious behavior disorders, comorbidity, scarce adherence to treatment, etc., as well as in regards to their prevalence. However, the study of PD in the general population has shown unequal results. In some studies, scarce attention has been given to them[1-3]. In others, very low prevalences have been obtained as general instruments were used for the detection of mental disorder[4,5]. Finally, the research conducted in Spain, with specific instruments for the detection of PD has provided more adjusted and relatively homogeneous results[6,7].

On the other hand, works have been conducted in the clinical population attended that contribute complementary data of clinical and health care interest[4,8]. Numerous studies have been performed in psychiatric sites, but the results have been very different based on the sampling and diagnostic criteria used[5]. In order to make the analysis, it is useful to omit those conducted in long-stay psychiatric hospitals and in specific disease units. When hospitalized patients are studied, the proportion of PD in the clinical population ranges from 6.4% to 11.6%, if the diagnosis has been made by clinical evaluation[9] (CE) and between 36% and 81% if standardized evaluation instruments (SEI) were used[10,11]. Studies published with out-patients have shown values between 5% and 12.9% by CE[12,13] and between 31.4% and 81% by SEI[14,15]. Finally, there are studies with hospitalized and out-patients, although it is difficult to establish if the sample includes the totality of psychiatric patients attended in the mental health (MH) network. In these, the proportion in the clinical population is 10.8% by CE[16] and ranges from 14% to 73.5% by SEI[4,17].

The available data coincide that the PD occur among the most usual patients of the medical services[4]. This group makes intensive use of the psychiatric services-hospital and out-patient, even more so than patients with major depressive disorder[18] and they have greater representation than would be expected among re-admissions[19]. Furthermore, both the professionals and the patients and their families are unsatisfied with the current care and demand new resources. However, the PD form a very heterogeneous group of patients whose care needs may be very different[20,21]. In Spain, there are very few studies that investigate the proportion of PD in the clinical population and the utilization of MH services and those that do so supply data limited to the hospital or out-patient setting[22], without considering the group of MH services of a health care sector. However, these data would be useful for planning new therapeutic programs and for the analysis of the care variability[19,23]. This study has aimed to: *a)* discover the proportion of PD in the clinical population attended in the group of MH services of a health care sector, and *b)* evaluate the utilization of out-patient and hospital resources by patients with personality disorder.

METHODOLOGY

Subjects

The study was conducted in the out-patient and hospital units of the Health Care Centers of Dr. Emilio Mira y López (CAEM) of Santa Coloma de Gramanet (SCG). The city is located in the metropolitan ring of Barcelona and has 117,127 inhabitants. The Health Care Centers of Dr. Emilio Mira y Lopez are the mental health reference of all the health care services of the zone. This is a cross-sectional descriptive study that has included all those patients seen during the year 2003 who have any PD as a first or second diagnosis. To avoid losses and repeated cases, the data base of the mental health center (MHC) has been compared with that of the hospital. Thus, 2,649 patients in the MHC (929 as first visit and 1720 in follow-up) and 52 more cases that were only recorded in the hospital have been identified. The study was conducted on 2,701 patients.

Evaluations and diagnosis

The diagnosis of PD was made by clinical interview according to the DSM-IV-TR criteria[24]. However, this was coded in the case registry according to the clinical modification of the ICD-9 (ICD-9-CM[25]) required by the Catalonia Health Care Service (CatSalut). As the reliability of the diagnoses made in the emergency department is very low, inclusion was stricter in the cases in which the diagnosis of PD was only made in this unit. In this case, either there had to be three diagnoses of PD in the emergency department during 2003 or a diagnosis of PD in the emergency department, but corroborated in an admission during the past 5 years. Exclusion criteria were: *a)* comorbid diagnosis of schizophrenic disorder (16 cases), schizophreniform, schizoaffective (1 case), bipolar I (1 case), moderate or superior mental retardation (1 case), cognitive disorder (1 case) and medical disease, since these may condition a different utilization of the services, and *b)* not living in SCG. Demographic endpoints were studied (age, gender, civil status, place of birth, work situation), clinical (cluster and specific type of PD, personal psychiatric backgrounds, comorbidity of other disorders on the axis I) and utilization of services (frequency of visits to the mental health centers and emergencies, number of admissions and days of stay in acute, subacute, day hospital and day center unit).

Statistical analysis

The percentages, except when expressly indicated, were calculated in relationship to the totality of the PD sample. Percentages, together with 95% confidence intervals (95% CI) were compared and those percentages whose CI did not overlap with the CI of the proportion of PD calculated for all the patients were indicated.

RESULTS

According to the inclusion criteria, a total of 296 PD, 162 (54.7%) as first diagnosis and 134 (45.3%) as second diagnosis, were detected. Most, 273 PDs (92.2%), were identified in the MHC while 12 (4.1%) and 11 (3.7%) were only attended in the acute unit or an emergency service, respectively. Thus, the proportion of PD in the clinical population attended in all of the psychiatric departments (n= 2.701) was 11% (95% CI: 9.8%-12.2%). The proportion of PD in the acute unit, emergency department, day hospital and MHC are shown in table 1. The PD profile was: women (58.4%), single (42.9%), born in Catalonia (55.1%), unskilled worker (31.8%) or skilled worker (17.6%), who came to the first consultation in our center at 37 years of age (SD: 13.9) and in whom a mean of 4.8 years (SD: 4.9) had passed since then. Mean age was 41.8 years (SD: 14.1); by age groups: 18-24 years (8.1%), 25-34 years (31.4%), 35-49 years (32.1%), 50-64 years (21%) and 65 or more years (7.4%). The most represented PD were (fig. 1) borderline (25.7%), histrionic (24%) and obsessive-compulsive (6.4%); 19.6% were diagnosed on unspecified PD (US). By clusters, 54.1% belonged to cluster B, 15.5% to C and 10.8% to A. In 77.7% of the PD, an axis I diagnosis coexisted. The most frequent disorders together with the personal psychiatric backgrounds are summarized in table II.

Regarding the utilization of the services (table I), the percentages regarding PD between admission to the AU, emergency consultations, admissions, stay in DH and total follow-up visits and those made by medical professionals in the MHC stand out. In regards to the number of visits in the MHC, two relevant groups of PD can be differentiated: The first, 72 PD (24.3%), made less than 3 visits/year; the second, 47 PD (15.9%), made more than 15 visits/year.

Table 1 Proportion in clinical population and utilization of services

	Total	Personality disorders		
	n	n	%	95% CI
Proportion in clinical population (patients attended)				
The combination of the service networks*	2,701	296	11.0	9.8-12.2
Acute unit	193	34	17.6**	12.9-23.6
Emergencies	721	72	10.0	8.0-12.4
Day hospital	17	6	35.3**	17.3-58.7
Mental Health Center	2,649	273	10.3	9.2-11.5
As first visit	929	63	6.8**	5.3-8.6
As follow-up	1,720	210	12.2	10.8-13.8
Discharges	513	29	5.7**	4.0-8.0
Utilization of services				
Acute unit				
No. of admissions	306	61	19.9**	15.8-24.8
Stays (days)	7,807	998	12.8	12.1-13.5
Emergencies				
No. of visits	1,340	206	15.4**	13.5-17.4
Day hospital				
No. of admissions	17	6	35.3**	17.3-58.7
Stays (days)	3,040	841	27.7	26.1-29.3
Mental health center				
No. of total follow-up visits	14,974	2,611	17.4**	16.8-18.1
No. of medical follow-up consultations***	11,602	2,330	20.1**	19.4-20.8
No. of non-medical follow-up consultations****	33,72	281	8.3**	7.4-9.3

*The subacute unit and day center did not attend to PD patients during 2003. **The percentage, together with the 95% confidence interval (95% CI), is significantly greater or lower than expected (between 9.8% and 12.2%). ***Made by psychiatrist or psychologist.****Made by nurse or social worker.

DISCUSSION

The proportion of PDs in the clinical population attended in all of the psychiatric departments (11%) could be conditioned by the social-demographic characteristics and health care habits of the health care sector investigated. However, the result is very similar to that obtained in New York by Oldham and Skodol[16] (10.8%) with out-patient and hospitalized patients by clinical evaluation in those in whom more than one diagnosis was studied. On the contrary, the percentage of PD (4.4%) in the clinical population in Navarra[26] during 2003, obtained only with the first

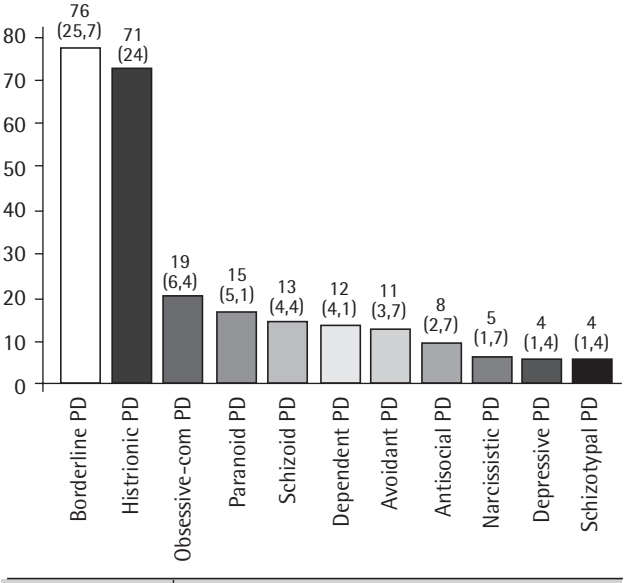

Figure 1 *Distribution of PD in the sample (%).*

Table 2 Comorbidity and psychiatric backgrounds

	Personality disorders (n = 296)	
	n	%
Axis I diagnosis		
Dysthymia	73	24.7
Anxiety disorder	50	16.9
SAD*	26	8.8
Mood state disorders (others**)	17	5.7
Adaptative disorders	17	5.7
Psychotic disorder (others***)	14	4.7
Mild mental retardation	6	2
Somatomorphic disorder	5	1.7
Others	10	3.4
Total	230	77.7
Psychiatric backgrounds		
Mood state disorder	90	30.4
Anxiety disorder ansiedad	54	18.2
SAD*	38	12.8
Psychotic disorder	23	7.8

*Substance abuse disorder. **Major depressive disorder, bipolar II disorder, US depressive disorder.***Brief psychotic disorder, US psychotic disorder.

diagnosis, is quite different. It is very important in the studies in a clinical population to study more than one diagnosis. In our study, if we had not evaluated the second diagnosis, the proportion of PD would have been 6%. The proportion of PD in the out-patients (10.3%) was in the high range (5%-12.9%) of that published in previous studies made with clinical evaluation[12,13]. On the contrary, the proportion of PD in hospital patients (17.6%) is higher than that obtained in previous works conducted with CE[4,9] (6.4%-11.6%). The proportion of PDs in day hospital patients (35.3%) is very high because there has been a specific therapeutic program in this unit since 2001[27]. However, all the values are much lower than those obtained by the studies that use standardized evaluation instruments (SAI) and, as the Zimmerman group[28] has demonstrated, many PD may be lost if these instruments are not used. Research with SEIs provides data having significant epistemological and nosological value that only confirm the psychopathological importance of the PD. However, it is debatable if these data reflect the true clinical reality and how useful they are for planning and managing the MH services. This fact is well reflected in the Reich and Troughton study[29]. They investigated the proportion of PDs in hospitalized patients, out-patients and health controls and obtained values of 43%, 55% and 20%, respectively. However, it is interesting to observe that one fifth of the apparently healthy persons had PD criteria and it could be questioned to what degree this information is clinically relevant.

Borderline and histrionic PD were the most represented. Thus, the most common PD were those of cluster B and the least common ones those of cluster A. These data coincide with most of the works published[4,13,16] in clinical samples where the diagnosis was made by CE. However, in several works[4,30,31] that used SEI, the avoidant and dependent borderline PDs were the most common. This agrees with the data offered by the DSM-IV-TR[24] so that it is likely that the PDs of the cluster C have been underdiagnosed. There may be a tendency by the clinician to diagnose the serious PD more often, that is, those in which the therapeutic alliance is more difficult or that are more prone to use the hospitalization and emergency services. The fact that the clinicians give little consideration to cluster C PD must be analyzed since it may be an important variable in the prediction of the natural history of axis I disorders[4], especially among the patients who report mixed psychiatric symptoms (anxious, depressive, somatomorphic, etc.) that clinically are not severe, but may persist for years[32-35]. The limited presence of narcissistic PDs in cluster B also stands out. Finally, the percentage of unspecified PD (US) is very important, a circumstance which, as Johnson et al.[36] point out, repeats in most of the psychiatric departments. Unfortunately, utilization of SEI has not provided more diagnoses of specific PD. Thus, in two recent studies with SEI, Zimmerman et al.[13] and Verheul, Bartak and Widiger[37], the proportion of US PD was 14.1% and 21.6%, respectively. Thus, the need to improve the diagnostic criteria for US PD has been proposed[36,37].

Regarding the utilization of the services, the percentage of PD among admissions to the AU, emergency consultations and total follow-up consultations and those made by medical specialists in the MHC are greater than expected, according to the percentage of PD in all the patients seen in all the services. These data coincide with the publications that stress the important utilization of the psychiatric services among PD[18,19]. On the contrary, the percentage of PD among hospital discharges is lower than expected. This could be an index of chronicity within the services. Finally, two important subgroups could be distinguished, those that consult very little and those that consult a lot. It would be useful to study these PD in greater depth.

As has already been mentioned, the social-demographic profile of the PD could be conditioned by the health care habits of the population of the health care sector investigated. However, the results regarding age, gender and civil status were similar to those of previous studies[4,13]. Furthermore, if we compare this profile with that of all the MHC patients[32], it can be observed that the PD subjects are proportionally younger, that men and single persons are more represented, and that the professional qualification level is somewhat higher. In this sense, the social-demographic characteristics of MHC patients would be more similar to

those of the mental health service user in the general Spanish population described in the ESEMeD-Spain study[38] and would be differentiated from those of the PDs. Finally, as in most of the studies[4,8,13,16], mood state, anxiety and substance abuse disorders were the most comorbid among the PD.

To finish up, it could be concluded that the study of PD and of the utilization of services in the population attended in the MH network of a health care district by clinical evaluation, although with clear limitations, may be an economical instrument that is easy to apply and repeat to plan for the planning and implementation of new care resources for the PD. The proportion of PD in the clinical population has been in the high range of that published in previous studies. Cluster B PD have been the most represented and the cluster C are underdiagnosed if we compare them with other investigations. It has been confirmed that the PD use the different psychiatric services in a significant way. The principal limitations of the study are the following: *a)* it is a retrospective study; *b)* standardized evaluation instruments have not been used, and *c)* the percentage of US PD is important, although this problem is common in this type of study[136,37].

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