



Are there more personality disorders in treatment-seeking patients with eating disorders than in other kind of psychiatric patients? A two control groups comparative study using the IPDE¹

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(Received May 11, 2006 / Recibido 11 de mayo 2006)

(Accepted September 14, 2006 / Aceptado 14 de septiembre 2006)

ABSTRACT. The aims of this *ex post facto* study were to determine the comorbidity of personality disorders (PD) with eating disorders (ED), to establish the prominent characteristics of eating disorders subtypes and to compare PDs appeared in patients with EDs with those in other clinical and normal samples. Using the International Personality Disorders Examination (IPDE), 84 outpatients with EDs were compared with 23 mentally disordered women and with 23 normative women. All the statistical analyses have been carried out using non-parametric analyses. 54.8% of ED sample met criteria for at least one PD compared to 21.7% of non-ED patients and to 8.7% of normative control group. The most common PDs in the ED group were the obsessive-compulsive, borderline and avoidant, without any differences among the EDs groups. More than a half of the subjects with anorexia nervosa and bulimia nervosa met the criteria for at least one PD and this was a specific characteristic of patients with an ED.

¹ This research, carried out by an agreement between the University of the Basque Country and Osakidetza (Basque Health Service), was supported by the University of the Basque Country (UPV 00006.231-H-13931/2001). The first author has been supported by a research grant from the Basque Government (BFI00.113).

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KEYWORDS. IPDE. Eating disorders. Personality disorders. *Ex post facto* study.

RESUMEN. Los objetivos de este estudio fueron determinar la comorbilidad de los trastornos de personalidad (TP) con los trastornos de la conducta alimentaria (TCA) y comparar los TP que presentan las pacientes con un TCA con los que presentan pacientes procedentes de otras muestras clínicas y sin patología psiquiátrica. Mediante la utilización del *International Personality Disorders Examination (IPDE)* se compararon 84 mujeres en tratamiento extrahospitalario por un TCA con 23 mujeres que presentaban otro trastorno mental y con 23 mujeres procedentes de una muestra normativa. El 54,8% de las mujeres con TCA cumplía criterios para, al menos, el diagnóstico de un TP, mientras que sólo el 21,7% de la muestra de pacientes sin TCA y el 8,7% de las mujeres del grupo control normativo lo hacían. Los TP más comunes en el grupo de pacientes con TCA fueron el TP obsesivo-compulsivo, el límite y el evitativo, sin que existieran diferencias estadísticamente significativas entre los diferentes grupos de TCA. Más de la mitad de personas con anorexia nerviosa y bulimia nerviosa cumplen criterios diagnósticos para, al menos, un TP, siendo esta característica específica de pacientes con un TCA.

PALABRAS CLAVE. *IPDE*. Trastornos de la conducta alimentaria. Trastornos de personalidad. Estudio *ex post facto*.

RESUMO. Os objetivos deste estudo foram determinar a comorbilidade das perturbações de personalidade (PP) com as perturbações do comportamento alimentar (TCA) e comparar as PP que apresentam as pacientes com uma PCA com as que apresentam pacientes procedentes de outras amostras clínicas e sem patologia psiquiátrica. Através da utilização do *International Personality Disorders Examination (IPDE)* compararam-se 84 mulheres em tratamento extra-hospitalar por PCA com 23 mulheres que apresentavam outra perturbação mental e com 23 mulheres procedentes de uma amostra normativa. Os 54,8% das mulheres com PCA cumpriam critérios para, pelo menos, o diagnóstico de um PP, enquanto que só 21,7% da amostra de pacientes sem PCA e 8,7% das mulheres do grupo de controlo normativo o faziam. As PP mais comuns no grupo de pacientes com PCA foram a PP obsessivo-compulsiva, de estado limite e a evitante, sem que existissem diferenças estatisticamente significativas entre os diferentes grupos de PCA. Mais de metade das pessoas com anorexia nervosa e bulimia nervosa cumprem critérios diagnósticos para, pelo menos, uma PP, sendo esta característica específica de pacientes com uma PCA.

PALAVRAS CHAVE. *IPDE*. Perturbações do comportamento alimentar. Perturbações de personalidade. Estudo *ex post facto*.

Introduction

The incorporation of the criteria for personality disorders (PD) on Axis II in the Diagnostic and Statistical Manual of Mental Disorders (DSM), the development of structured diagnostic interviews such as the International Personality Disorders

Examination (IPDE; Loranger, 1995) or the Structured Clinical Interview for DSM-III-R Personality Disorders (SCID-II; Spitzer, Williams, and Gibbon, 1987), and the development of self-report questionnaires, such as the Millon Clinical Multiaxial Inventory-II (MCMI-II; Millon, 1987), have encouraged clinicians to conduct research about the relationship between PDs and eating disorders (ED) (Echeburúa and Marañón, 2001; Marañón, Echeburúa, and Grijalvo, 2004; Matsunaga, Kirriike, Nagata, and Yamagami, 1998; Wonderlich, Fulerton, Swift, and Klein, 1994).

In spite of the difficulties in the assessment of personality disorders in this kind of samples because of patients' young age and the interference of semi-starvation and chaotic eating (Vitousek and Stumpf, 2005), many studies have been carried out in this field since Gartner, Marcus, Halmi, and Loranger presented one of the earliest and most serious research in 1989. In their review Echeburúa and Marañón (2001) found that the comorbidity of PDs in patients with EDs is generally very high: it can range from 20% to 80%. In that report they found that the prevalence rates of PDs among patients with EDs were higher when a self-report questionnaire is used for the diagnosis of a PD, than when the PDs assessment is carried out by structured interviews.

There are numerous reports of personality disorder pathology in different eating disorders. However, few studies have directly compared personality pathology with other kind of psychiatric patients. Most of the researches published do not have control groups and those studies with a control group had only a clinical control group (Grilo, Levy, Becker, Edell, and McGlashan, 1996; Striegel-Moore, Garvin, Dohm, and Rosenheck, 1999) or a normative control group (Díaz-Marsá, Carrasco, and Saiz, 2000; Herpertz-Dahlmann, Müller, Herpertz, and Heussen, 2001; Karwautz, Rabe-Hesketh, Collier, and Treasure, 2002; Martín, Motos, and Del Águila, 2001), but not both at the same time.

Since PDs diagnosis has been fraught with controversy and difficulty, even though diagnostic criteria have become more refined in recent years, it is important to use appropriate assessment tools. Structured interviews generally are more reliable and allow consideration of important observational data, but they require extensive training and experience on the part of interviewer (Segal and Coolidge, 1998).

In a previous study of patients with Eds, IPDE diagnoses were carried out (Marañón *et al.*, 2004). Beyond that research, the main aims of this *ex post facto* study (Montero and León, 2005; Ramos-Álvarez, Valdés-Conroy, and Catena, 2006) were, first, to find out if the frequency and profile of PDs among treatment-seeking women with EDs were different from normal population and from women without an ED who sought treatment for another Axis I mental disorder. And second, to establish the prominent personality characteristics of EDs subtypes, as measured by a structured interview (the IPDE). Our main hypotheses are that women with EDs will have more PDs than the other groups, and that patients with bulimia will be more affected by borderline PD and patients with anorexia by obsessive-compulsive PD. This study has both theoretical and applied implications and could add relevant information to the existing literature. The accurate understanding of PDs in women with EDs could help to guide further research regarding treatment decisions according to the patient's personality pattern.

Method

Subjects

Participants were 130 young women ($M = 21.95$ years, $SD = 5.01$). 84 of them met criteria for an ED diagnosis according to DSM-IV-TR (American Psychiatric Association, 2000); the other 46 women formed the clinical and the normative control groups. All of them gave written informed consent to take part in the study. The 84 subjects of the eating disordered group included 20 people with anorexia nervosa restricting subtype (ANr), 11 with anorexia nervosa bingeing/purging subtype (ANp), 29 with bulimia nervosa (BNp) and 24 diagnosable as eating disorder not otherwise specified (EDNOS). All these subjects were in treatment for ED. All of them were recruited in an outpatient clinical setting from the Eating Disorders Unit of Osakidetza (Basque Health Service), sited in San Sebastián (Basque Country, Spain), between January 2001 and August 2003. That specific Unit is the reference centre for an area of 350000 inhabitants.

The clinical control group was formed by 23 outpatients women. All of them were in treatment for diverse mental disorders different from eating disorders and none of them have had a diagnosis of ED before. The most frequent diagnoses, according to DSM-IV-TR criteria, were anxiety disorder (26%), substance dependence disorder (26%), adaptive disorder (22%), major depression (17%), and pathological gambling (9%). These patients were recruited in different outpatient mental health services of Osakidetza (Basque Health Service), sited in the Basque Country (Spain), between January and December 2003. Those specific Units are the reference centres for the same area of 350000 inhabitants before commented. The normative control group was composed by 23 people without current or past mental disorders of the Axis I, selected among the normal population. All groups were matched by age and sex.

Instruments

The EDs and the other Axis I disorders were diagnosed by a clinical interview following the DSM-IV-TR diagnosis criteria. The diagnoses were established independently by one experienced psychiatrist and one clinical psychologist. Based on its good psychometric characteristics, the personality disorders were assessed using the Spanish version (López-Ibor, Pérez-Urdániz, and Rubio, 1996) of the International Personality Disorders Examination (IPDE; Loranger, 1995). This is a structured interview with 99 questions, divided into five general content areas (work, self, interpersonal relations, affect, and impulse control). It covers all the criteria for the 11 Axis II disorders of DSM-IV. Its interrater reliability (median: .73) and test-retest reliability (median: .87) generally are good (Blanchard and Brown, 1998; Loranger *et al.*, 1994; Segal and Coolidge, 1998).

Procedure

Once the diagnosis for the ED or for other Axis I disorders (in the clinical control group) was carried out, and before the treatment, all the patients were interviewed with the IPDE. First, they filled in the IPDE screening test; and later, they answered the questions related to that personality scales which had been positive at the screening. The assessment of the normative control group was carried out with the same instrument

and in the same way. The IPDE interview was conducted by a doctoral-level psychologist with extensive experience in diagnostic assessment with structured interviews.

In this study the data analyzed have been the following ones: a) both the overall prevalence rate of personality disorders and the prevalence of PDs among the subtypes of EDs; b) the PDs profile of these patients. For the statistical analyses, the nonparametric Kruskal-Wallis *H* test and contingency tables were used.

Results

The overall prevalence rate for at least one PD was 54.8% for the ED sample. In contrast the 21.7% of the clinical control sample and the 8.7% of the normative control group showed at least one personality disorder. The differences found between the three groups were statistically significant ($\chi^2_2 = 20.06, p < .001$). PDs were most frequently diagnosed in patients with EDs than in the women of the two control groups (see Table 1).

TABLE 1. Frequency of personality disorders in all sample.

<i>Personality disorders</i>	<i>ED</i>		<i>CCG</i>		<i>NCG</i>		χ^2
	<i>n = 84</i>		<i>n = 23</i>		<i>n = 23</i>		
	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>	
Paranoid	1	1.2	0	0	0	0	.55
Schizoid	0	0	0	0	0	0	-
Schizotypal	0	0	0	0	0	0	-
Histrionic	2	2.4	1	4.3	0	0	.97
Antisocial	0	0	0	0	0	0	-
Narcissistic	1	1.2	1	4.3	0	0	1.63
Borderline	16	19	2	8.7	0	0	6.11*
Obsessive-compulsive	19	22.6	1	4.3	2	8.7	5.63
Dependent	2	2.4	0	0	0	0	1.11
Avoidant	14	16.7	2	8.7	0	0	4.99
Non-specified	10	11.9	0	0	0	0	5.93*
Total	46	54.8	5	21.7	2	8.7	20.06**

NOTES. ED: eating disorder; CCG: clinical control group; NCG: normative control group; The total number of people affected by PD is inferior to the total sum of disorders because there are patients who present more than one PD.

* $p < .05$, ** $p < .001$

PDs were diagnosed in 65.5% of the subjects in BNp group, in 63.6% of the subjects in ANp group, in 54.2% of the subjects in EDNOS group and, finally, in 35% of the subjects in ANr group. These differences found between groups of patients with subtypes of EDs were not statistically significant (see Table 2).

TABLE 2. Frequency of personality disorders in different eating disorders groups.

<i>Personality disorders</i>	<i>ANr</i>		<i>ANp</i>		<i>BNp</i>		<i>EDNOS</i>		χ^2
	<i>n = 20</i>		<i>n = 11</i>		<i>n = 29</i>		<i>n = 24</i>		
	n	%	n	%	n	%	n	%	
Paranoid	0	0	0	0	0	0	1	4.2	2.53
Schizoid	0	0	0	0	0	0	0	0	-
Schizotypal	0	0	0	0	0	0	0	0	-
Histrionic	0	0	0	0	1	3.4	1	4.2	1.23
Antisocial	0	0	0	0	0	0	0	0	-
Narcissistic	0	0	0	0	0	0	1	4.2	2.53
Borderline	0	0	2	18.2	8	27.6	6	25	6.63
Obsessive-compulsive	3	15	6	54.5	4	13.8	6	25	8.44*
Dependent	1	5	1	9.1	0	0	0	0	4.01
Avoidant	3	15	2	18.2	6	20.7	3	12.5	.70
Non-specified	2	10	0	0	5	17.2	3	12.5	2.35
Total	7	35	7	63.6	19	65.5	13	54.2	4.86

NOTES. ANr: anorexia nervosa restricting subtype; ANp: anorexia nervosa bingeing/purging subtype; BNp: bulimia nervosa; EDNOS: eating disorder not otherwise specified; The total number of people affected by PD is inferior to the total sum of disorders because there are patients who present more than one PD.

* $p < .05$

Most of the people with a PD were affected by only one PD (see Table3). When all the subjects with an ED were considered together, obsessive-compulsive PD (22.6%) was most commonly found, followed by borderline PD (19%), avoidant PD (16.7%) and not otherwise specified PD (11.9%). No diagnoses of schizoid, schizotypal or antisocial PD were made in this sample. The most frequently diagnosed PDs in the clinical control group were the borderline (8.7%) and avoidant (8.7%). Finally, in the normative control group there were only 2 subjects (8.7%) with a obsessive-compulsive PD. When the three groups were compared, the patients with EDs were more frequently diagnosed with a borderline PD ($\chi^2_2 = 6.11, p < .05$) and with a not otherwise specified PD ($\chi^2_2 = 5.93, p < .05$) than the subjects belonging to the two control groups (see Table 1).

TABLE 3. Number of personality disorders in people with at least one personality disorder.

<i>Number of personality disorders</i>	<i>ED</i>	<i>GCC</i>	<i>NCG</i>
	<i>n = 46</i>	<i>n = 5</i>	<i>n = 2</i>
	<i>n (%)</i>	<i>n (%)</i>	<i>n (%)</i>
1	32 (69.6%)	3 (60%)	2 (100%)
2	9 (19.6%)	2 (40%)	0
3	5 (10.9%)	0	0

NOTE. ED: eating disorders; CCG: clinical control group; NCG: normative control group.

The most prevalent PD among patients with ANr (15%) or ANp (54.5%) was the obsessive-compulsive PD. The most diagnosed in BNp was the borderline PD (27.6%). And in EDNOS the most prevalent PDs were the borderline (25%) and the obsessive-compulsive (25%). Moreover, when the different EDs were compared, the patients with ANp were more frequently diagnosed than the patients with ANr, BNp or EDNOS with an obsessive-compulsive PD (ANr = 15%; ANp = 54.5%; BNp = 13.8%; and EDNOS = 25%) ($\chi^2_3 = 8.44, p < .05$) (see Table 2).

Regarding the three clusters of PDs, the cluster C (anxious-fearful subjects) PDs were most commonly diagnosed (ED = 31%; CCG = 13%; NCG = 8.7%), followed by the cluster B (dramatic-emotional-erratic subjects) PDs (ED = 20.2%; CCG = 8.7%). Comparing the 3 groups, the patients in the ED group were more often diagnosed with a cluster C ($\chi^2_2 = 6.72, p < .05$) and cluster B ($\chi^2_2 = 6.71, p < .05$) PDs than the women in both control group (see Table 4).

TABLE 4. A, B or C personality disorder profiles in all sample.

<i>Personality disorder profiles</i>	<i>ED</i>	<i>CCG</i>	<i>NCG</i>	χ^2
	<i>n = 84</i>	<i>n = 23</i>	<i>n = 23</i>	
	<i>n (%)</i>	<i>n (%)</i>	<i>n (%)</i>	
Cluster A odd-eccentric	1 (1.2%)	0	0	.55
Cluster B dramatic-emotional-erratic	17 (20.2%)	2 (8.7%)	0	6.71*
Cluster C anxious-fearful	26 (31%)	3 (13%)	2 (8.7%)	6.72*

NOTE. ED: eating disorder; CCG: clinical control group; NCG: normative control group.

* $p < .05$

When comparing the fourth different eating disorders groups, in ANr, ANp and BNp the most frequently diagnosed cluster of PDs was the cluster C and in EDNOS the most common was the cluster B. Anyway no statistically significant differences between ED groups were found (see Table 5).

TABLE 5. A, B or C in different personality disorder profiles eating disorders groups.

<i>Personality disorder profiles</i>	<i>ANr</i>	<i>ANp</i>	<i>BNp</i>	<i>EDNOS</i>	χ^2
	<i>n = 20</i>	<i>n = 11</i>	<i>n = 29</i>	<i>n = 24</i>	
	<i>n (%)</i>	<i>n (%)</i>	<i>n (%)</i>	<i>n (%)</i>	
Cluster A odd-eccentric	0	0	0	1 (4.2%)	2.53
Cluster B dramatic-emotional-erratic	0	2 (18.2%)	8 (27.6%)	7 (29.2%)	7.26
Cluster C anxious-fearful	5 (25%)	7 (63.6%)	8 (27.6%)	6 (25%)	6.38

NOTE. ANr: anorexia nervosa restricting subtype; ANp: anorexia nervosa binge/purging subtype; BNp: bulimia nervosa; EDNOS: eating disorder not otherwise specified.

Discussion

This study is included in a large investigation whose purpose is to know the comorbidity between PDs and EDs, assessed by the MCMI-II and the IPDE. The main contribution of this study to a better knowledge of comorbidity of PDs and ED is related to the specific method used. That is, apart from the ED group, there were a clinical and a normative control groups. The aim of this procedure was to find out if the frequency and profile of PDs among EDs were different from normal population and from non ED patients who sought treatment for another Axis I mental disorder.

The most relevant conclusion of this study was that more than a half of subjects with ED (55%) met DSM-IV-TR diagnostic criteria for at least one PD, compared to 22% of the non ED patients and to 9% of the normative control group. The main contribution of this study, consequently, is to have proven that this high rate of comorbidity with PDs is specific of eating disorders and much higher than in other Axis I mental disorders. This finding is consistent with those of previous reports using structured interviews to assess PDs in EDs (Gartner *et al.*, 1989; Matsunaga *et al.*, 1998) and with those using only one of the control group we used (Díaz-Marsá *et al.*, 2000; Grilo *et al.*, 1996; Herpertz-Dahlmann *et al.*, 2001). This fact is a challenge for the clinical practice, because the presence of a PD in a patient with AN or BN complicates the treatment, and the prognosis of the ED becomes poorer (Díaz-Marsá, Carrasco, Prieto, and Saiz, 1999).

Regarding the specific subtypes of eating disorders, no differences were found among groups in the global number and in the type of PDs. This finding is the same that Gartner *et al.* (1989), Norman, Blais and Herzog (1993), Inceoglu, Franzen, Backmund and Gerlinghoff (2000), and Godt (2002) obtained in their studies. Unlike other studies, where there are differences in PDs clusters prevalence depending on ED diagnoses (Marañón *et al.*, 2004; Martín *et al.*, 2001; Matsunaga *et al.*, 1998; Norman *et al.*, 1993), there are not prevalence differences between PDs cluster in different EDs in our study. The most frequent PDs in our sample were the obsessive-compulsive, borderline and avoidant. These findings are consistent with those found by other authors (Gartner *et al.*, 1989; Grilo *et al.*, 1996; Marañón *et al.*, 2004; Matsunaga *et al.*, 2000; Sansone, Levitt, and Sansone, 2005).

In addition, in this study the patients with ANp were the ones who showed more frequently an obsessive-compulsive PD. The same conclusion has been drawn in some previous studies (Gartner *et al.*, 1989; Marañón *et al.*, 2004), but not in others (Matsunaga *et al.*, 1998). Furthermore, if the analysis was done exclusively with the patients in the ANp group, the most frequent PD in that group was the obsessive-compulsive. In other author's studies, however, the most prevalent PD in the ANp patients was the borderline PD (Díaz-Marsá *et al.*, 2000; Grilo *et al.*, 1996; Sansone *et al.*, 2005).

These results show that, beyond the different data found in the published studies (*e.g.*, Echeburúa, Marañón, and Grijalvo, 2002), the EDs are disorders which rarely appear psychopathologically pure. It is common for them to appear complicated with Axis II clinical disorders. This fact should be taken into account when planning treatment. To do so, the design of intervention programmes which consider personality aspects would be useful. In this way, the development of specific therapeutic programmes for the EDs comorbid with PDs is a challenge for clinical research (Palmer *et al.*, 2003).

In the future, it would be useful to increase the sample size to generate generalized and reliable findings. Moreover, in further research it should be analyzed which symptoms are related to the presence of PDs in ED patients. This knowledge is necessary to create and to implement differentiated intervention programmes that consider the differences between eating disordered patients with or without PDs. From a psychopathological perspective, it is surprising that patients with an EDNOS constitute 29% of the total sample in our study and they are the most numerous subgroup after BNp. These data need to be analysed in future research, to further clarify the currently existing subtypes in the DSM-IV-TR and in the CIE-10 (Marañón *et al.*, 2004). Finally, in this study, according to the diagnostic philosophy contained within DSM-IV-TR, PDs have been considered in a categorical way, that is, as discrete entities of abnormal behavior patterns. However, although DSM-IV-TR approaches clinical diagnoses from a categorical perspective, there is an increasing empirical research which has approaching the clinical assessment of PDs from a dimensional perspective (Segal and Coolidge, 1998) because one of the most perplexing difficulty in this clinical field is the definition and measurement of personality dysfunction (Sansone and Levitt, 2005). This point is needed of further research.

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