Are There Gender Differences in DSM-IV Personality Disorders?

Carlos M. Grilo

This study examined gender differences in DSM-IV personality disorders (PD) in outpatients. Structured diagnostic interviews were reliably administered to a consecutive series of 145 outpatients with a primary axis I diagnosis of binge eating disorder (BED). To further reduce variability due to heterogeneity of axis I, a subgroup of 75 patients with co-occurring major depressive disorder (MDD) was retested for gender differences. Overall, the proportion of males (34.4%) and females (27.4%) diagnosed with any PD did not significantly differ. Specific PD diagnoses were not differentially distributed by gender in the overall study group of patients with BED or in the subgroup of patients with BED and MDD, except for antisocial PD in males.

THE DSM-IV notes that most personality disorders (PD) are diagnosed differentially by gender. DSM-IV does make some qualifications, mostly notably that–for some PD purported to be diagnosed more frequently in females (e.g., dependent PD) "in clinical settings, . . . the sex ratio of this disorder is not significantly different than the sex ratio of females within the respective clinical setting. Moreover, some studies using structured assessments report similar prevalence rates" (pp 667).[1]

Five studies, four with adult patient groups[2-5] and one with a representative community sample from Norway,[6] have used structured diagnostic interviews to test for gender differences in DSM-III-R PD. Two studies[2,4] with heterogeneous study groups of inpatients found higher rates of antisocial PD in men, as well as higher rates of cluster A PD diagnoses: schizoid[2] and schizotypal[4] in men. Two studies with outpatients[3,5] ascertained adults with a primary diagnosis of major depression in attempt to limit the potential impact of axis I diagnoses on the assessment of PD. Both found higher rates of narcissistic and obsessive-compulsive PD in males, while one[5] also found higher rates in males of antisocial, borderline, schizotypal, and paranoid PD. The community study[6] found that males and females had similar overall prevalence rates of PD (13.7% and 12.6%, respectively). Males had statistically significantly higher prevalence rates of three PD (antisocial, obsessive-compulsive, and passive-aggressive), whereas females did not have significantly higher prevalence rates of any PD.[6]

Thus, studies of gender differences in PD with adult patient groups have generally not supported certain statements contained in the DSM-IV. Most notably, none of the adult studies have reported higher (different proportion) rates of any PD in females. In contrast, however, studies have supported the DSM estimates that cluster A PDs and the antisocial PD may be more common in men. This issue has not yet been empirically addressed using DSM-IV criteria.

This study examined gender differences in the frequency of DSM-IV PD in a consecutive series of adult outpatients with a primary axis I diagnosis of binge eating disorder (BED). To further reduce heterogeneity and to control further for psychiatric diagnoses,[3-5] this issue was also explored in a subgroup of patients with BED with co-occurring major depressive disorder (MDD).

METHOD

Subjects

Participants were a consecutive series of 145 adult outpatients with a primary DSM-IV diagnosis of BED. Thirty-two (22.1%) participants were male and 113 (77.9%) were female. Mean age was 43.7 years (SD 9.1); 88.3% (n = 128) were Caucasian; 87.6% (n = 127) attended at least some college; and 66.2% (n = 96) were married. Men and women did not differ significantly with regard to demography. Participants provided written informed consent.

Procedure

Participants were given the Structured Clinical Interview for DSM-IV Axis I Disorders[7] to assess for axis I diagnoses and the Diagnostic Interview for DSM-IV Personality Disorders[8] to assess PD. The diagnostic interviews were performed by Ph.D.

From the Department of Psychiatry, Yale University School of Medicine, New Haven, CT.

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Address reprint requests to Carlos M. Grilo, Ph.D., Yale University School of Medicine, PO Box 208098, 301 Cedar St, New Haven, CT 06520.

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Table 1. Distribution of DSM-IV Personality Disorders by Gender

	Consecutive Study Group (N = 145)						Depressed Study Group (N = 75)					
	Males (n = 32)		Females (n = 113)				Males (n = 15)		Females (n = 60)			
	n	%	n	%	$\chi^2_{(df=1)}$	*P*	n	%	n	%	$\chi^2_{(df=1)}$	*P*
Any PD	11	34.4	31	27.4	0.30	NS	6	40.0	20	33.3	0.03	NS
Cluster A	3	9.4	4	3.5	0.80	NS	2	13.3	2	3.3	0.04	NS
Paranoid	3	9.4	4	3.5	0.80	NS	2	13.3	2	3.3	0.00	NS
Schizoid	0	0.0	0	0.0	0.00	NS	0	0.0	0	0.0	- -	NS
Schizotypal	0	0.0	1	0.9	0.00	NS	0	0.0	0	0.0	- -	NS
Cluster B	4	12.5	6	5.3	1.04	NS	2	13.3	4	6.7	0.10	NS
Borderline	3	9.4	5	4.4	0.42	NS	2	13.3	3	5.0	0.34	NS
Antisocial	3	9.4	2	1.8	2.35	NS	2	13.3	0	0.0	3.89	.05
Histrionic	0	0.0	2	1.8	0.00	NS	0	0.0	0	0.0	- -	NS
Narcissistic	2	6.3	2	1.8	0.57	NS	1	6.7	1	1.7	0.32	NS
Cluster C	7	21.9	30	26.5	0.09	NS	5	33.3	20	33.3	0.00	NS
Avoidant	4	12.5	22	19.5	0.42	NS	3	20.0	14	23.3	0.00	NS
Dependent	0	0.0	2	1.8	0.00	NS	0	0.0	0	0.0	- -	NS
Obsessive-compulsive	4	12.5	16	14.2	0.00	NS	3	20.0	11	18.3	0.00	NS

NOTE. Chi-square values shown are Yates corrected and are for two-tailed tests. For antisocial PD comparison in the MDD study group, Fisher exact test = .038.

research clinicians blind to the study's aims. Diagnoses for axis I and axis II diagnoses were reliably assigned. Kappa coefficients for inter-rater reliability were 1.0 for BED and 0.75 for MDD. For axis II PD diagnoses, kappa coefficients for inter-rater reliability ranged from .57 to 1.0. Final research diagnoses were established by the "best estimate method," based on the structured interviews and any additional relevant data. Participants also completed the Beck Depression Inventory (BDI).[9] The BDI provides a dimensional measure of depressive and negative affect to complement the MDD diagnosis as a measure of state effects.

RESULTS

Table 1 summarizes the frequency of PD separately for men and women in the consecutive study group of patients with BED, and chi-square analyses (with Yates correction for continuity) testing for group differences. The proportion of males (34.4%) and females (27.4%) diagnosed with any PD did not differ significantly. None of the specific PD diagnoses were (significantly) differentially distributed by gender.

Seventy-five (51.7%) participants met criteria for MDD (lifetime or current). The distribution of MDD did not differ significantly between men (46.9%, n = 15) and women (53.1%, n = 60) (χ^2 [*df* = 1] with Yates correction = 0.178, not significant [NS]). In this subgroup, the proportion of males (40.0%) and females (33.3%) diagnosed with any PD did not differ significantly. As summarized in Table 1, none of the specific PD diagnoses were (significantly) differentially distributed by gender, except for antisocial PD, which was diagnosed in 13.3% (n = 2) of males and no females (Fisher exact test = .038).

Although no significant gender differences existed in the distribution of MDD, potential mood effects on the distribution of PD were further explored by examining BDI scores. Men and women did not differ significantly in level of depression (BDI) in either the overall (n = 145) study group (mean = 17.4 [SD 11.2] *v* 18.4 [SD 8.6]; $F(1,144) = 0.31$, NS) or in the subgroup (n = 75) with lifetime MDD (mean= 22.7 [SD 12.9] *v* mean = 20.7 [SD 8.6]; $F(1,74) = 0.52$, NS).

DISCUSSION

In contrast to prevailing clinical lore, it appears that few gender differences exist in the distribution of PD. DSM-IV–defined PD were not differentially distributed by gender in the overall study group of 145 patients with BED. Moreover, PD were not differentially distributed in the homogeneous subgroup of 75 patients with co-occurring MDD and BED, with the one notable exception of a higher rate of antisocial PD in males. These findings are generally consistent with previous findings for DSM-III-R PD across different patient groups[2-5] and a representative