

V. Pérez¹
J. Barrachina²
J. Soler¹
J. C. Pascual¹
M. J. Campins¹
D. Puigdemont¹
E. Álvarez¹

The clinical global impression scale for borderline personality disorder patients (CGI-BPD): a scale sensible to detect changes

¹ Departamento de Psiquiatría.
Hospital de la Santa Creu i Sant Pau
Universitat Autònoma (UAB)
Barcelona

² Hospital de Dia Lúria
CPB-SSM

The CGI-BPD scale is an adaptation of the Clinical Global Impression (CGI) scale designed to assess severity and post-intervention changes in patients with Borderline Personality Disorder (BPD). It contains 10 items that score the nine relevant psychopathological domains of BPD, plus an additional global score. The CGI-BPD has two formats, the CGI-BPD-S, to evaluate the present severity, and the CGI-BPD-I to evaluate improvement. To establish the psychometric properties of the CGI-BPD, the test was administered to 78 BPD patients, 11 men and 67 women, within the framework of a 4-month therapeutic intervention. The modified scale showed good validity and reliability (α 0.85 and 0.89; CCI: 0.86 and 0.78), adequate sensitivity to change, and a two-factor structure accounting for 67.4% of total variance. While remaining simple to administer, the CGI-BPD may correct the excessive generalisation contained in its original version and is a useful tool to evaluate severity and change in BPD patients.

Key words:

Scale. CGI. Borderline personality disorder. Change. Evaluation. Trials.

Actas Esp Psiquiatr 2007;35(4):229-235

Impresión clínica global para pacientes con trastorno límite de la personalidad (ICG-TLP): una escala sensible al cambio

La ICG-TLP es una adaptación de la escala de Impresión Clínica Global (ICG) diseñada con el objetivo de evaluar tanto la severidad como el cambio postintervención en pacientes diagnosticados de trastorno límite de la personalidad (TLP). Está compuesta por 10 ítems que puntúan los nueve dominios psicopatológicos relevantes del TLP y una puntuación global adicional. La ICG-TLP consta de dos formatos, la ICG-TLP-S para evaluar la severidad actual y la ICG-TLP-M para evaluar la mejoría.

Para establecer las propiedades psicométricas de la ICG-TLP ésta fue administrada a 78 pacientes (11 hombres y 67 mujeres) en el marco de una intervención terapéutica de 4 meses de duración. La ICG-TLP muestra buenas características de validez, fiabilidad (α de 0,85 y 0,89; CCI: 0,86 y 0,78), una adecuada sensibilidad al cambio y una estructura factorial de dos factores que explican el 67,4% de la varianza total. La ICG-TLP es una escala simple y fácil de administrar que corrige la excesiva generalización característica de su versión original y permite evaluar la severidad y el cambio en pacientes TLP.

Palabras clave:

Escala. ICG. Trastorno límite de la personalidad. Cambio. Evaluación. Ensayos.

INTRODUCTION

Borderline Personality Disorder (BPD) has generated a great deal of interest in clinical research due to its high prevalence and medical cost¹. Several instruments have been developed to diagnose and evaluate this condition.

These tools, such as the DIB-R², for example, provides a reliable diagnosis and may even determine the severity of the disorder. However, as the evaluation is performed within a time framework, instruments of this type are not designed to detect changes due to a given intervention. Furthermore, as they take a considerable time, such tools are difficult to administer during follow-up visits.

Many of the studies published so far have used a battery of different scales for the evaluation of BPD, since this disorder displays a wide spectrum of symptoms. The most commonly applied scales are the Hamilton Rating Scale-Depression (HRS-D)³ which evaluates symptomatology of depression, or the Brief Psychiatric Rating Scale (BPRS)⁴ for psychotic symptoms. However, some characteristic BPD symptoms, such as feelings of emptiness, fear of abandonment or problems in interpersonal relationships, are not considered in these scales. Tools for the specific evaluation of BPD severity and changes produced by a given intervention have recently been developed^{5,6}.

Correspondence:

Víctor Pérez
Departamento de Psiquiatría
Hospital de la Santa Creu i Sant Pau
Av. Sant Antoni M.⁸ Claret, 167
08025 Barcelona, Spain
E-mail: vperez@hsp.santpau.es

The CGI scale⁷ has frequently been used in clinical studies to evaluate both the severity of the disorder and the changes induced by a given intervention. It has been utilized as a primary variable of the efficacy of interventions and has been applied to a great variety of psychiatric disorders, such as schizophrenia⁸ and depression⁹. It consists of three global measures designed to evaluate the efficacy of a given treatment: *a)* severity of disease; evaluating the present severity of the patient's symptoms; *b)* global improvement; comparing the patient's present and baseline state, and *c)* index of efficacy; comparing the patient's baseline condition with a ratio of the present therapeutic benefit and the severity of side effects.

It is easy to apply and provides general information concerning the patient's condition as well as the changes caused by an intervention. These characteristics have made it a fundamental variable in studies that aim to determine the efficacy of interventions¹⁰. However, its simple and generic format, which allows its application to any disorder, has been questioned for being unreliable^{11,12}.

The adaptation of the CGI to a given disorder may represent a useful and easy tool, which may also warrant higher validity of the instrument. In this regard, Spearing et al.¹³ designed a modification of the CGI for bipolar disorder (CGI-BP), adjusting the characteristic symptoms and phases of the disorder.

The CGI-BPD was adapted from the original CGI for specific use in evaluating the severity and change in BDP patients. The objective of this study was to analyse the psychometric properties of the CGI-BPD, both in its format to evaluate severity (CGI-BPD-S) and in its format to evaluate changes in borderline symptomatology (CGI-BPD-I).

MATERIAL AND METHOD

Subjects

The sample consisted of 78 BPD outpatients who were participating in several clinical trials in our psychiatric department¹⁴. In all patients, BPD was diagnosed by means of the semi-structured DIB-R and SCID-II interviews. Ages ranged between 18 and 45 years and at the time of inclusion in the present study there were no cases of organic brain syndrome, schizophrenia, drug-induced psychosis, alcohol or other substance dependence, bipolar disorder, mental deficiency or major depression. Written informed consent to take part in the study was obtained in all cases.

Material

- *Clinical Global Impression Scale for Borderline Personality Disorder Patients (CGI-BPD)*. This scale is composed of 10 items, the first 9 evaluate the BPD psychopathological domains related to the 9 diagnostic

criteria set by the DSM-IV-TR, while the tenth is a balanced global evaluation. The CGI-BPD evaluates both the severity of the illness and changes which take place in any of the 9 domains. Each item is scored from 1 to 7 depending on the frequency and intensity of symptoms (see appendix). The CGI-BPD has 2 formats: *a)* CGI-BPD-S, to evaluate the present severity of each of the 9 symptoms, and *b)* CGI-BPD-I, to evaluate the improvement of each of the symptoms when compared to baseline evaluation.

- *Diagnostic Interview for Borderlines-Revised (DIB-R)*². This semi-structured diagnostic interview for BPD is composed of 125 items from which 22 summarised statements (SS) are derived with 3 possible score values (0: no; 1: probable; 2: yes). These SS in turn produce the four area scores (AS): cognition, affect, impulse action patterns and interpersonal relationships. The AS determine the overall score on a scale from 0 to 10, where scores equal to or above 6 are rendered compatible with the diagnosis of BPD. The DIB-R had been validated previously for the Spanish population¹⁵.
- *Structured Clinical Interview for DSM-III-R Personality Disorders (SCID-II)*¹⁶. This semi-structured diagnostic interview for axis II disorders has a previous validation for the Spanish population¹⁷.
- Hamilton Rating Scale-Depression (HRS-D)³, Hamilton Rating Scale-Anxiety (HRS-A)¹⁸ and Montgomery-Asberg Depression Rating Scale (MADRS)¹⁹ to measure the intensity of depressive and anxious symptoms.
- *Brief Psychiatric Rating Scale (BPRS)*⁴. To evaluate the intensity and characteristics of psychotic symptoms.
- *Buss-Durkee Inventory (BDI)*²⁰. This self-administered questionnaire is used to assess overall hostility. Seven subscale scores are obtained (attack/assault, indirect hostility irritability, negativism, resentment, mistrust/suspiciousness and verbal hostility).
- *Profile of Mood States (POMS)*²¹. Questionnaire with 35 adjectives describing the subjective mood state, grouped into 6 categories: anxiety, depression, hostility, vigour, fatigue and confusion.
- *Behavioural Reports (BR)*. Weekly recordings that include frequency of suicide attempts, attendance at emergency services, aggressive-impulsive behaviour and binge eating.

Procedure and analysis

The scales were administered every fortnight, although the psychometric analysis was performed using baseline and final evaluation scores.

The SPSS/PC (version 11.0) statistical package was used and the following analyses were performed: study of the internal validity (factorial structure) of CGI-BPD by means of

a principal components analysis; estimate of the internal consistency of CGI-BPD with Cronbach's alpha coefficient; interrater reliability with intraclass correlations; sensitivity to change comparing the baseline and the final (post-therapeutic intervention) scores of the CGI-BPD, and HRS-D, HRS-A, MADRS, BPRS, BDI, POMS, BR.

To study the concurrent validity of CGI-BPD, we used the correlations of the scale's items and groups of items that evaluate the same content of the DIB-R and SCID-II interviews.

RESULTS

The sample was composed of 78 subjects, 14.1% males and 85.9% females, and mean age was 26.96 (SD: 5.82, and

range: 19-43). BPD symptomatology was moderately severe (DIB-R mean: 7.36; SD: 1.36; range: 6-9:).

Validity

We determined the concurrent validity of the CGI-BPD scale by comparing these scores with 39 items of the DIB-R diagnostic interview for evaluation of the same symptoms (abandonment with items 88,89,90; unstable relationships with items: 98, 99, 100; impulsivity with items: 59, 60, 62, 70-79; suicide with items: 65, 67, 68; affective instability with items: 5-7, 11-13, 16, 18; emptiness with item: 22; anger with items: 13, 73-76; paranoid ideation with items: 36, 37, 38). Additionally, the identity item was compared with the equivalent SCID-II item 92. The comparison with diagnostic interviews had previously been used to establish con-

Anexo							
CGI-BPD-S							
Considering your total clinical experience with this particular population, how mentally ill is the subject at this time?							
	Normal, not at all ill	Borderline mentally ill	Mildly ill	Moderately ill	Markedly ill	Severely ill	Among the most extremely ill subjects
1. Abandonment	1	2	3	4	5	6	7
2. Unstable rel.	1	2	3	4	5	6	7
3. Identity	1	2	3	4	5	6	7
4. Impulsivity	1	2	3	4	5	6	7
5. Suicide	1	2	3	4	5	6	7
6. Affect inst.	1	2	3	4	5	6	7
7. Emptiness	1	2	3	4	5	6	7
8. Anger	1	2	3	4	5	6	7
9. Paranoid id.	1	2	3	4	5	6	7
BPD general	1	2	3	4	5	6	7
CGI-BPD-I							
Rate total improvement, whether or not, in your judgement, it is due entirely to treatment. Compared to subject's condition at baseline how much has he/she changed?							
	Very much improved	Much improved	Minimally improved	No change	Minimally worse	Much worse	Very much worse
1. Abandonment	1	2	3	4	5	6	7
2. Unstable rel.	1	2	3	4	5	6	7
3. Identity	1	2	3	4	5	6	7
4. Impulsivity	1	2	3	4	5	6	7
5. Suicide	1	2	3	4	5	6	7
6. Affect inst.	1	2	3	4	5	6	7
7. Emptiness	1	2	3	4	5	6	7
8. Anger	1	2	3	4	5	6	7
9. Paranoid id.	1	2	3	4	5	6	7
BPD general	1	2	3	4	5	6	7

Table 1

Converging validity of CGI-BPD-S and groups of items from the DIB-R and SCID-II
with the same content

	(DIB-R) Abandonement	(DIB-R) Unstable rel.	(SCID-II) Identity	(DIB-R) Impulsivit	(DIB-R) Suicide	(DIB-R) Affect. inst	(DIB-R) Emptiness	(DIB-R) Anger	(DIB-R) Paranoid id.
CGI-BPD-S 1	0.354**	0.182	-0.024	0.008	0.296*	0.198	0.034	-0.079	0.344**
Abandonment	0.004	0.147	0.843	0.948	0.017	0.114	0.788	0.531	0.005
CGI-BPD-S 2	0.196	0.337**	0.139	0.409**	0.365**	0.221	-0.013	0.417**	0.410**
Unstable rel.	0.118	0.006	0.246	0.001	0.003	0.077	0.915	0.001	0.001
CGI-BPD-S 3	0.374**	0.250*	-0.032	0.095	0.005	0.082	0.293*	-0.077	0.145
Identity	0.002	0.041	0.788	0.444	0.969	0.510	0.016	0.534	0.241
CGI-BPD-S 4	-0.136	0.220	-0.043	0.510**	0.281*	0.047	0.046	0.462**	0.259*
Impulsivity	0.280	0.079	0.719	0.000	0.024	0.712	0.717	0.000	0.037
CGI-BPD-S 5	-0.159	0.135	0.213	0.001	0.593**	-0.019	0.171	0.070	0.188
Suicide	0.205	0.282	0.075	0.994	0.000	0.880	0.174	0.579	0.135
CGI-BPD-S 6	0.150	0.200	0.057	0.242*	0.411**	0.233	0.344**	0.188	0.345**
Affect inst.	0.227	0.105	0.634	0.048	0.000	0.058	0.004	0.128	0.004
CGI-BPD-S 7	0.130	0.211	0.368**	0.029	0.242	0.120	0.484**	-0.107	0.125
Emptiness	0.297	0.088	0.002	0.819	0.050	0.337	0.000	0.392	0.317
CGI-BPD-S 8	-0.078	0.106	-0.110	0.443**	0.328**	0.340**	0.169	0.493**	0.306*
Aner	0.532	0.399	0.362	0.000	0.007	0.005	0.176	0.000	0.013
CGI-BPD-S 9	0.096	0.189	0.142	0.231	0.352*	0.302*	0.209	0.267	0.520**
Paranoid id.	0.515	0.199	0.325	0.115	0.014	0.037	0.154	0.066	0.000

*p < 0.05. **p < 0.001. (DIB-R); (SCID-II): groups of items of DIB-R and SCID-II interviews with a similar content to the corresponding item of the CGI-BPD-S.

current validity of scales in BPD⁶. Table 1 shows the correlations between the scores of the DIB-R and SCID-II interviews with the 9 items of the CGI-BPD-S.

Structure and internal consistency

Principal components analysis of the CGI-BPD-S shows a two factor solution that can be interpreted with «eigenvalues» over 1.

Table 2 shows the factor loads of the 9 items of the scale for each factor. The two factor solution explains 67.4% of the total variance. The first factor, with 47.8% variance, groups 5 of these 9 items: impulsivity, anger, suicide, and, with less factorial load, paranoid ideation and unstable relationships. This factor has thus been labelled «behavioural/interpersonal disorder». The second factor accounts for 19.5% variance and is composed of 4 items: Identity, emptiness, abandonment and affective instability, all referring to alterations in identity, and labelled as «problems of the Self».

The scale's internal consistency evaluated using α Cronbach's statistical α is 0.85 for CGI-BPD-S and 0.89 for CGI-BPD-I. In the item by item analysis of the α value, the scale is homogeneous and no irrelevant items appear that might harm the global α .

To determine the reliability between evaluations, the intraclass correlation coefficient was used (ICC) for each item of the CGI-BPD-S and the CGI-BPD-I. The scores obtained by two investigators who independently evaluated a subsample of 30 subjects were compared. The ICC scores for each scale and item appear in table 3.

Table 2

Factorial loads and factors
of the CGI-BPD-S

CGI-BPD-S items	Factor 1 (behavioural/ interpersonal disorder)	Factor 2 (problems of the Self)
4. Impulsivity	0.889	
8. Anger	0.883	
5. Suicide	0.712	
9. Paranoid ideation	0.696	
2. Unstable relationships	0.583	
3. Identity		0.884
7. Emptiness		0.842
1. Abandonment		0.793
6. Affect instability		0.653

Table 3

Intraclass correlations of the CGI-BPD-S
(n = 30) and CGI-BPD-I (n = 30)

Items	CGI-BPD-S	CGI-BPD-I
Abandonment	0,89*	0,76*
Unstable relationships	0,81*	0,84*
Identity	0,82*	0,68*
Impulsivity	0,86*	0,79*
Suicide	0,92*	0,71*
Affect instability	0,89*	0,78*
Emptiness	0,85*	0,83*
Anger	0,78*	0,85*
Paranoid ideation	0,93*	0,82*
Global	0,86*	0,78*

* p < 0.001.

Sensitivity to change

To establish the scale's capacity to detect improvement in BPD symptomatology the scores obtained on the CGI-BPD-I were related with the improvement observed in the symptom scales. For this purpose, the level or percentage of improvement was determined comparing the initial scores with the final post-treatment scores on particular items and scales. The correlations between the scores of the CGI-BPD-I and those on improvement are shown in table 4.

DISCUSSION

Although BPD is the most commonly studied personality disorder in clinical assays, until recently, no specific tools were available to detect changes produced by interventions. Most studies to date used multiple symptomatology scales designed to evaluate the severity of Axis I disorders. A re-

Table 4

Correlations between improvements in the CGI-BPD-I and the symptomatology scales

	CGI-BPD-I Abandonment	CGI-BPD-I Unstable Rel.	CGI-BPD-I Identity	CGI-BPD-I Impulsivity	CGI-BPD-I Suicide	CGI-BPD-I Affect Inst.	CGI-BPD-I Emptiness	CGI-BPD-I Anger	CGI-BPD-I Paranoid Id.	CGI-BPD-I total
HRS-D	-0.478**	-0.580**	-0.473**	-0.608**	-0.474**	-0.501**	-0.341**	-0.575**	-0.396**	-0.655**
	0.000	0.000	0.000	0.000	0.000	0.000	0.008	0.000	0.028	0.000
HRS-A	-0.501**	-0.583**	-0.517**	-0.561**	-0.510**	-0.519**	-0.337**	-0.576**	-0.464**	-0.687**
	0.000	0.000	0.000	0.000	0.000	0.000	0.008	0.000	0.009	0.000
MADRS	-0.531**	-0.594**	-0.535**	-0.631**	-0.524**	-0.608**	-0.402**	-0.621**	-0.486**	-0.722**
	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.019	0.000
BPRS	-0.475**	-0.565**	-0.477**	-0.544**	-0.445**	-0.532**	-0.372**	-0.540**		-0.640**
	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000		0.000
POMS-global		-0.282*		-0.280*						-0.287*
		0.041		0.046						0.035
POMS-aggressiveness		-0.321*		-0.412**	-0.290*			-0.348**		-0.354**
		0.020		0.003	0.039			0.009		0.009
POMS-anxiety		-0.304*		-0.353*	-0.279*			-0.292*		-0.321*
		0.028		0.011	0.047			0.031		0.018
RC-binging			-0.275*							
			0.049							
RC-emmer. visits			-0.273							
			0.050							
RC-impulsiveness				-0.309*						
				0.033						
BDI-mistrust						-0.260*			-0.432*	
						0.043			0.022	
BDI-resentment					-0.312*				-0.405*	
					0.018				0.033	
BDI-attack								-0.260*		
								0.045		

* p < 0.05. ** p < 0.001. Hamilton Rating Scale-Depression (HRS-D), Hamilton Rating Scale-Anxiety (HRS-A), Montgomery-Asberg Depression Rating Scale (MADRS), Brief Psychiatric Rating Scale (BPRS), Profile of Mood States (POMS), Behavioural Recordings (BR), Buss-Durkee Inventory (BDI).

cently developed tool, the Zan-BPD⁶, has the same objectives as the CGI-BPD and good psychometric properties. In contrast with this instrument, the CGI-BPD consists of two formats, one oriented towards severity (CGI-BPD-S) and the other to improvement (CGI-BPD-I). Moreover, the present study describes results concerning not only changes related to the inherent variation of the disorder itself over time, but also those changes related to the effects of the psychopharmacological treatment carried out during 4 months.

The correlations obtained between the items of the CGI-BPD and those of the diagnostic interviews show a high converging validity. Nevertheless, two items, identity and Affective Instability seem to have a scarce or null relationship with comparative group items. Although certain items have a very specific performance, as is the case of suicide which only relates to its own diagnostic group items, there are normally correlations with other groups (from one to four). This is probably inevitable in a disorder such as BPD which has numerous interrelated areas of dysregulation (affect, behaviour, interpersonal relationships, identity and cognition).

The factorial analysis displayed an structure which included two factors that accounted for most of the total variance. The «behavioural/interpersonal disorder» factor included items that evaluated suicide, impulsivity, aggressiveness, behavioural disorders, unstable relationships and paranoid ideation, which provide significance to the factor. Regarding the «problems of the Self» factor, it included items related to identity, affective instability, and abandonment. Although those items that assessed abandonment may be better understood as another area of the «behavioural/interpersonal disorder» factor, our results showed that it weighted more as an index of fear of loneliness, rather than related to a behavioural/relational pattern. In this regard, other studies have reported factor structures in BPD which included from two factors²² to five factors²³.

The CGI-BPD scale has a high internal consistency indicating a significant general homogeneity of the instrument, as well as good interdependence between the items. It shows a good reliability between evaluations, with greater agreement in the evaluation of severity than in the level of post-treatment improvement. The correlations remain high between the two evaluations even for the item showing less concordance.

Two issues must be taken into consideration when interpreting the capacity of the CGI-BPD-I to detect pre and post-treatment changes. First, as Zanarini already mentioned in her work⁶, some of the contents that are explored by the CGI-BPD (e.g., emptiness, abandonment or identity) are not comparable with more generic symptomatology related to mental disorders, which is evaluated by other scales (e.g. HRS-D, BPRS, etc.) A similar situation is observed with items such as unstable relations and affect instability, which are

only partially or indirectly assessed by those psychiatric scales (for example, unstable relations usually appears as related to aggressiveness). Second, as expected, we did not find improvements in items such as emptiness and identity given that these symptoms might need longer therapeutic interventions (at least one year) to detect significant post-intervention changes.

We detected improvements in impulsivity, anger and paranoid ideation, areas that are easier to compare with other indexes. It seems reasonable that behavioural items such as impulsivity and anger are sensitive to the changes induced by brief therapeutic interventions, but surprisingly, we also detected improvements in paranoid ideation. This may be related to the overall reduction in anxiety induced by treatment as paranoid ideation in BPD is a transient and stress-related symptom.

The suicide item was only specifically related with the Resentment subscale of the Buss Durkee test, and not with the items of Self-mutilation or Impulsiveness as could be expected. Finally, we wish to point out that excessively general scales (HRS-D, HRS-A, MADRS or BPRS) are very sensitive to overall changes produced by an intervention but extremely unspecific in respect to the type of change that has occurred.

The CGI-BPD, which was developed for use in treatment studies in patients with BPD, maintains the advantage of the CGI scale in that it is simple and quick to apply, and its specific format corrects the excessive generalization of its original version. Furthermore, it shows good psychometric performance in aspects related to validity, reliability and sensitivity to change.

ACKNOWLEDGMENTS

Study supported by grants from the Fondo de Investigación Sanitaria (Ministry of Health, Spain), FIS: 03/1434 and by Spanish Ministry of Health, Instituto de Salud Carlos III, RETICS RD06/0011 (REM-TAP) Network.

REFERENCES

1. Clarkin JF, Marziali E, Munroe-Blum H. Borderline Personality disorder: clinical and empirical perspectives. New York: Guilford Press, 1992.
2. Zanarini MC, Gunderson JG, Frankenburg FR, Chauncey DL. The revised diagnostic interview for borderlines: discriminating borderline personality disorders from other Axis II disorders. *J Pers Dis* 1989;3:10-8.
3. Hamilton M. A rating scale for depression. *J Neurol Neurosurg Psychiatry* 1960;23:56-62.
4. Overall JE, Gorham DR. The Brief Psychiatric Rating Scale. *Psychol Rep* 1962;10:799-812.
5. Bogenschutz MP, Nurnberg G. Olanzapine versus placebo in the treatment of Borderline Personality Disorder. *J Clin Psychiatry* 2004;65:104-9.

6. Zanarini, MC. Zanarini Rating Scale for Borderline Personality Disorder (ZAN-BPD): a continuous measure of DSM-IV borderline psychopathology. *J Pers Dis* 2003;7:233-42.
7. Guy W. Clinical Global Impressions. En: ECDEU Assessment Manual for Psychopharmacology, revised. Rochville: National Institute of Mental Health, 1976.
8. Honer W, MacEwan G, Kopala L, Altman S, Chisholm-Hay S, Singh K, et al. A clinical study of clozapine treatment and predictors of response in a Canadian sample. *Canad J Psychiatry* 1995;40:208-11.
9. Salzmann E, Robin JL. Multicentric double-blind study comparing efficacy and safety of minaprine and imipramine in dysthymic disorders. *Pharmacopsychiatrie* 1995;31:68-75.
10. Lehmann E. Practicable and valid approach to evaluate the efficacy of nootropic drugs by means of rating scales. *Pharmacopsychiatrie* 1984;17:71-5.
11. Beneke M, Rasmus W. Clinical global Impressions (ECDEU): some critical comments. *Pharmacopsychiatrie* 1992;25:171-6.
12. Dahlke F, Lohaus A, Gutzmann H. Reliability and clinical concepts underlying global judgements in dementia: implications for clinical research. *Psychopharmacol Bull* 1992;28: 425-32.
13. Spearing MK, Post RM, Leverich, Brandt D, Nolen W. Modification of the Clinical Global Impressions (CGI) scale for use in bipolar illness (BP): the CGI-BP. *Psychiatry Res* 1997;73: 159-71.
14. Soler J, Pascual JC, Campins J, Barrachina J, Puigdemont D, Álvarez E, et al. Double-blind, placebo-controlled study of dialectical behavior therapy plus olanzapine for borderline personality disorder. *Am J Psychiatry* 2005;162:1221-4.
15. Barrachina J, Soler J, Campins MJ, Tejero A, Pascual JC, Álvarez E, et al. Validación de la versión española de la Diagnostic Interview for Borderlines Revised (DIB-R. *Actas Esp Psiquiatr* 2004; 32:293-8.
16. Spitzer RL, Williams JBW, Gibbon M, First MB. Structured Clinical Interview for DSM-III-R Personality Disorders (SCID-II version 1.0). Washington: American Psychiatric Press, 1990.
17. Gómez Beneyto M, Villar M, Renovell M, Pérez F, Hernández M, Leal C, et al. The diagnosis of personality disorder with a modified version of the SCID-II in a spanish clinical sample. *J Pers Dis* 1994;8:104-110.
18. Hamilton M. The assessment of anxiety states by rating. *Br J Med Psychol* 1959;32:50-5.
19. Montgomery SA, Asberg M. A new depression scale designed to be sensitive to change. *Br J Psychiatry* 1979;134:382-9.
20. Buss AH, Durkee A. An inventory for assessing different kinds of hostility. *J Consult Psychol* 1957;21:343-9.
21. McNair DA, Lorr M, Droppelman LF. Profile of mood states. San Diego (CA): Educational and Industrial Testing Service, 1971.
22. Rosenberg PH, Miller GA. Comparing borderline definitions: DSM-III borderline and schizotypal personality disorders. *J Abnormal Psychology* 1989;98:161-9.
23. Fossati A, Maffei C, Bagnato M, Donati D, Namia C, Novella L. Latent structures analysis of DSM-IV borderline personality disorder criteria. *Compr Psichiatria* 1999;40:72-9.