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**EDITORIAL** 

# Tertiarism in psychiatry: Barcelona *Clínic* Bipolar Disorders Programme

## Terciarismo en psiquiatría: el Programa de Trastornos Bipolares del *Clínic* de Barcelona

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Tertiarism is understood to mean an array of services that are 1) highly specialized or require a high level of technology or professional experience and 2) recommended to be concentrated at fewer centres within the public healthcare system because of their low prevalence, risk, interconnection with other processes, and/or high cost.1 The definition of tertiarism in Psychiatry is somewhat more ambiguous, since most psychiatric disorders are highly prevalent and the use of technology is more limited than in other medical specialties. Without question, however, forms of mental disorders do exist that are of the highest clinical complexity (due to their cross-sectional or longitudinal severity, comorbidity, and associated complications) and less prevalent than the mild or moderate forms of the disease, and technological advances are starting to be introduced not only in the research environment but also in the clinical practice setting. Although in some sectors the practice of psychiatry tends to be viewed as more artistic and subjective and not very "high-tech," the reality is that the neuropsychopathology assessment as well as ancillary testing and pharmacological and psychotherapeutic interventions have achieved a degree of sophistication that, in highly complex patients, clearly fits the definition of tertiarism. If, to this, we add therapeutic innovations such as deep brain stimulation, vagus nerve stimulation, and transcranial magnetic stimulation—not to mention the technical advancements in electroconvulsive therapy-it becomes apparent that a Psychiatry of high technology and complexity does exist, though limited, obviously, to a significant minority of cases. Tertiarism goes hand in hand with specialization or with what we could call "superspecialization." The Psychiatry of today is in the middle of a process of defining subspecialties. some of which, such as Child Psychiatry and Addiction Psychiatry, are fully established while others, such as subspecialties in schizophrenia, bipolar disorder, autism, gastrointestinal tract disorders, and other areas have emerged only in recent decades. As was seen first in internal medicine and subsequently in many medical specialties, the evolution of knowledge has resulted in the emergence of specialized units for specific pathologies: for example, units for epilepsy, HIV infection, and bipolar disorder, to give an example from our specialty. Specialized units go hand in hand with tertiarism, offering diagnostic and therapeutic interventions for highly complex patients who could not receive proper treatment from primary care or conventional specialty care centres. In Spain, one of the first specialized units established in the field of Psychiatry is the bipolar disorder unit or program at Hospital Clínic of Barcelona (PBC).2

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The PBC opened in 1995 at the Hospital Clínic of Barcelona, a university general hospital well known for its strong tradition of uniting healthcare, teaching, and research. The Clínic and the University of Barcelona share a research institute called the *Institut d'Investigació* Biomèdica August Pl i Sunver that channels its resources through the Fundació Clínic. The PBC was not recognized officially until 2001, but by that time it had already reached a satisfactory cruising speed in terms of healthcare, teaching, and research output. Among the first research projects, which were all very clinical, was an important project to develop a psychoeducational program. This was financed under a Health Research Funding project (Fondos de Investigación Sanitaria, FIS) of the Instituto de Salud Carlos III and the Stanley Medical Research Institute of Bethesda, Maryland (United States), which also supported neurocognitive (an area of this disease unexplored at that time) and epidemiological research and some clinical trials. enabling us to acquire the experience to expand our ability to analyse new drugs and techniques in the treatment of bipolar disorder. At the same time, the PBC began to acquire a reputation both within and beyond our borders, and this attracted young clinicians and researchers from various countries who wanted to train with the team. The PBC's true specialty on the healthcare side is the treatment of highly complex patients (for example, rapid cyclers); on the teaching side, it is the training of young clinicians and researchers in management of these patients and in psychopharmacology, neuropsychology, and specific psychotherapies; and on the research side, it is responding to questions that arise at the patient's bedside and bridging the gap between research of a more experimental nature and its application in clinical practice. Today, the PBC has 23 permanent members plus the staffing and equipment resources of the Hospital Clinic and its affiliated institutions. In addition to providing quality specialized healthcare—with a continuity of care impossible to achieve without an organization by programs—over the course of its existence, the PBC has generated knowledge (as opposed to devices) in areas such as the neurobiology, epidemiology, methodology, and treatment of bipolar disorder. The PBC cares for almost 800 patients, half of whom go there because they are referred to it as a centre for highly complex cases and the rest because they live in the geographical area assigned to the hospital and its mental health centre. In the last 15 years, it has contributed almost 400 articles published in the leading scientific journals, more than 1300 impact factor points, and some 8,000 citations. The focus remains clinical but has expanded to include aspects that are clearly translational, such as important contributions in genetics,3 biomarkers, 4,5 neuroimaging, 6,7 neuropsychology, 8-11 met hodology, 12,13 psychopat hology, 14-18 epidemiology, 19-21 psychopharmacology, 22-32 and psychotherapy, in the form of psychoeducation. 33-37 The PBC has also made noteworthy contributions in the development and validation of specific psychometric instruments, 38,39 the psychosocial functioning of patients, 40-43 the assessment of therapeutic compliance, 44 and the preparation of clinical practice guides at a local and international level. 45-51 In recent years, the Generalitat de Catalunya [Government of Catalonia] has recognized the PBC as a consolidated research group and has increased its

funding and collaborations via its participation in expert centre networks throughout Spain and in Europe, such as ENBREC (European Network of Bipolar Research Expert Centres) 52 and the *Centro de Investigación Biomédica En Red de Salud Mental (CIBERSAM)* 53 [Mental Health Network Biomedical Research Centre]. The synergy generated through collaborative research with other Spanish, 54-58 European, 59-64 and intercontinental 65-71 centres has been crucial to the development of large-scale, multidisciplinary projects. Collaboration with the pharmaceutical industry—always undertaken with maximum transparency 72-73—must also be highlighted, for through this collaboration a great number of new treatments for bipolar disorder have been made available to clinicians and their patients. 22-32

Perhaps some are not yet convinced that tertiarism does exist in Psychiatry, or they may see it as something that is needlessly sophisticated and costly. Our experience shows that specialized units are a necessity and, in some cases, a reality-that they contribute to fairness in the healthcare system and are effective when their sphere of activity is clearly defined, which should be, above all, to support mental health centres and the community network of psychiatrists and to promote the successful advancement of teaching and research. We trust that, in an era of restricted spending and funding, medical institutions and those who manage them will understand the importance of supporting this modern-day approach to Psychiatry, for every patient has a right to what it offers: the highest ethical standards merged with excellence and access to technology.

#### References

- Guarga A, Pla R, Benet J, Pozuelo A. Planificación de los servicios de alta especialización en Cataluña. Med Clin (Barc). 2008;131 Suppl 4:55—9.
- Vieta E. Bipolar Units and Programmes: Are they really needed? World Psychiatry. En prensa 2011.
- Tabarés-Seisdedos R, Mata I, Escámez T, Vieta E, López-Ilundain JM, Salazar J, et al. Evidence for association between structural variants in lissencephaly-related genes and executive deficits in schizophrenia or bipolar patients from a Spanish isolate population. Psychiatr Genet. 2008;18:313—7.
- Vieta E, Martínez-De-Osaba MJ, Colom F, Martínez-Arán A, Benabarre A, Gastó C. Enhanced corticotropin response to corticotropin-releasing hormone as a predictor of mania in euthymic bipolar patients. Psychol Med. 1999;29:971—8.
- Posa AR, Frey BN, Andreazza AC, Ceresér KM, Cunha AB, Quevedo J, et al. Increased serum glial cell line-derived neurotrophic factor immunocontent during manic and depressive episodes in individuals with bipolar disorder. Neurosci Lett. 2006;407:146—50.
- Benabarre A, Vieta E, Martín F, Lomeña F, Martínez-Aràn A, Colom F, et al. Clinical value of 99mTc-HMPAO SPECT in depressed bipolar I patients. Psychiatry Pes. 2004;132:285—9.
- Phillips ML, Vieta E. Identifying functional neuroimaging biomarkers of bipolar disorder: toward DSW-V. Schizophr Bull. 2007;33:893—904.
- Martínez-Arán A, Vieta E, Reinares M, Colom F, Torrent C, Sánchez-Moreno J, et al. Cognitive function across manic or hypomanic, depressed, and euthymic states in bipolar disorder. Am J Psychiatry. 2004;161:262—70.

- Torrent C, Martínez-Arán A, Daban C, Sánchez-Moreno J, Comes M, Goikolea JM, et al. Cognitive impairment in bipolar II disorder. Br J Psychiatry. 2006;189:254—9.
- Sanchez-Moreno J, Martinez-Aran A, Colom F, Scott J, Tabares-Seisdedos R, Sugranyes G, et al. Neurocognitive dysfunctions in euthymic bipolar patients with and without prior history of alcohol use. J Clin Psychiatry. 2009;70:1120—7.
- Bonnín CM, Martínez-Arán A, Torrent C, Pacchiarotti I, Posa AR, Franco C, et al. Clinical and neurocognitive predictors of functional outcome in bipolar euthymic patients: a long-term, follow-up study. J Affect Disord. 2010;121:156—60.
- Vieta E, Carné X. The use of placebo in clinical trials on bipolar disorder: a new approach for an old debate. Psychother Psychosom. 2005;74:10—6.
- Martinez-Arán A, Vieta E, Chengappa KN, Gershon S, Mullen J, Paulsson B. Reporting outcomes in clinical trials for bipolar disorder: a commentary and suggestions for change. Bipolar Disord. 2008;10:566—79.
- Vieta E, Gastó C, Otero A, Nieto E, Vallejo J. Differential features between bipolar I and bipolar II disorder. Compr Psychiatry. 1997;38:98—101.
- Colom F, Vieta E, Daban C, Pacchiarotti I, Sánchez-Moreno J. Clinical and therapeutic implications of predominant polarity in bipolar disorder. J Affect Disord. 2006;93:13—7.
- Vieta E, Phillips ML. Deconstructing bipolar disorder: a critical review of its diagnostic validity and a proposal for DSM-V and ICD-11. Schizophr Bull. 2007;33:886—92.
- 17. Vieta E, Suppes T. Bipolar II disorder: arguments for and against a distinct diagnostic entity. Bipolar Disord. 2008;10:163—78.
- Colom F, Vieta E. The road to DSM-V. Bipolar disorder episode and course specifiers. Psychopathology. 2009;42:209—18.
- Vieta E, Colom F, Corbella B, Martinez-Arán A, Reinares M, Benabarre A, et al. Clinical correlates of psychiatric comorbidity in bipolar I patients. Bipolar Disord. 2001;3:253—8.
- Tohen M, Vieta E, Gonzalez-Pinto A, Peed C, Lin D, Euro-pean Mania in Bipolar Longitudinal Evaluation of Medication (EMBLEM) Advisory Board. Baseline characteristics and outcomes in patients with first episode or multiple episodes of acute mania. J Clin Psychiatry. 2010;7:255—61.
- 21. Angst J, Meyer TD, Adolfsson R, Skeppar P, Carta M, Benazzi F, et al. Hypomania: a transcultural perspective. World Psychiatry. 2010;9:41—9.
- 22. Vieta E, Goikolea JM, Corbella B, Benabarre A, Reinares M, Martínez G, et al., Group for the Study of Risperidone in Affective Disorders (GSRAD). Risperidone safety and efficacy in the treatment of bipolar and schizoaffective disorders: results from a 6-month, multicenter, open study. J Clin Psychiatry. 2001;62:818—25.
- Vieta E, Martinez-Arán A, Goikolea JM, Torrent C, Colom F, Benabarre A, et al. A randomized trial comparing paroxetine and venlafaxine in the treatment of bipolar depressed patients taking mood stabilizers. J Clin Psychiatry. 2002 Jun;63:508— 12
- Tohen M, Vieta E, Calabrese J, Ketter TA, Sachs G, Bowden C, et al. Efficacy of olanzapine and olanzapine-fluoxetine combination in the treatment of bipolar I depression. Arch Gen Psychiatry. 2003;60:1079

  –88.
- Vieta E, Cruz N, García-Campayo J, de Arce R, Manuel Crespo J, Vallès V, et al. A double-blind, randomized, placebocontrolled prophylaxis trial of oxcarbazepine as adjunctive treatment to lithium in the long-term treatment of bipolar I and II disorder. Int J Neuropsychopharmacol. 2008;11:445—52.
- Vieta E, T'joen C, McQuade RD, Carson Jr WH, Marcus RN, Sanchez R, et al. Efficacy of adjunctive aripiprazole to eit- her valproate or lithium in bipolar mania patients partially nonresponsive to valproate/lithium monotherapy: a placebocontrolled study. Am J Psychiatry. 2008;165:1316—25.

- Vieta E, Suppes T, Eggens I, Persson I, Paulsson B, Brecher M.
   Efficacy and safety of quetiapine in combination with lithium
   or divalproex for maintenance of patients with bipolar I
   disorder (international trial 126). JAffect Disord. 2008;109:251—
- Van der Loos ML, Mulder PG, Hartong EG, Blom MB, Vergouwen AC, De Keyzer HJ, et al., LamLit Study Group. Efficacy and safety of lamotrigine as add-on treatment to lithium in bipolar depression: a multicenter, double-blind, placebo-controlled trial. J Clin Psychiatry. 2009;70:223—31.
- Vieta E, Ramey T, Keller D, English PA, Loebel AD, Miceli J. Ziprasidone in the treatment of acute mania: a 12-week, placebo-controlled, haloperidol-referenced study. J Psychopharmacol. 2010;24:547—58.
- 30. El Mallakh RS, Vieta E, Pollin L, Marcus R, Carson WH, McQuade R. A comparison of two fixed doses of aripiprazole with placebo in acutely relapsed, hospitalized patients with bipolar disorder I (manic or mixed) in subpopulations (CN138-007). Eur Neuropsychopharmacol. 2010 Nov;20:776—83.
- Vieta E, Nuamah IF, Lim P, Yuen EC, Palumbo JM, Hough DW, et al. A randomized, placebo- and active-controlled study of paliperidone extended release for the treatment of acute manic and mixed episodes of bipolar I disorder. Bipolar Disord. 2010 May;12:230—43.
- Vieta E, Locklear J, Günther O, Ekman M, Miltenburger C, Chatterton ML, et al. Treatment options for bipolar depression: a systematic review of randomized, controlled trials. J Clin Psychopharmacol. 2010 Oct;30:579—90.
- Colom F, Vieta E, Martinez-Aran A, Peinares M, Goikolea JM, Benabarre A, et al. A randomized trial on the efficacy of group psychoeducation in the prophylaxis of recurrences in bipolar patients whose disease is in remission. Arch Gen Psychiatry. 2003;60:402—7.
- Scott J, Colom F, Vieta E. A meta-analysis of relapse rates with adjunctive psychological therapies compared to usual psychiatric treatment for bipolar disorders. Int J Neuropsychopharmacol. 2007;10:123—9.
- 35. Peinares M, Colom F, Sánchez-Moreno J, Torrent C, Martínez-Arán A, Comes M, et al. Impact of caregiver group psychoeducation on the course and outcome of bipolar patients in remission: a randomized controlled trial. Bipolar Disord. 2008;10:511—9.
- Scott J, Colom F, Popova E, Benabarre A, Cruz N, Valenti M, et al. Long-term mental health resource utilization and cost of care following group psychoeducation or unstructured group support for bipolar disorders: a cost-benefit analysis. J Clin Psychiatry. 2009;70:378—86.
- Colom F, Vieta E, Sánchez-Moreno J, Palomino-Otiniano R, Peinares M, Goikolea JM, et al. Group psychoeducation for stabilised bipolar disorders: 5-year outcome of a randomised clinical trial. Br J Psychiatry. 2009;194:260—5.
- Torrent C, Vieta E, Crespo JA, Gonzalez-Pinto A, del Valle J, Olivares JM, et al. [Barcelona Bipolar Eating Disorder Scale (BEDS): a self-administered scale for eating distur- bances in bipolar patients]. Actas Esp Psiquiatr. 2004;32: 127—31.
- Vieta E, Sánchez-Moreno J, Bulbena A, Chamorro L, Pamos JL, Artal J, et al., EDHIPO (Hypomania Detection Study) Group. Cross validation with the mood disorder questionnaire (MDQ) of an instrument for the detection of hypomania in Spanish: the 32 item hypomania symptom check list (HCL-32). J Affect Disord. 2007;101:43—55.
- Vieta E, Cieza A, Stucki G, Chatterji S, Nieto M, Sánchez-Moreno J, et al. Developing core sets for persons with bipolar disorder based on the International Classification of Functioning, Disability and Health. Bipolar Disord. 2007;9:16—24.
- Martinez-Aran A, Vieta E, Torrent C, Sanchez-Moreno J, Goikolea JM, SalameroM, et al. Functional outcome in bipo- lar

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disorder: the role of clinical and cognitive factors. Bipolar Disord. 2007;9:103—13.

- Rosa AR, Sánchez-Moreno J, Martínez-Aran A, Salamero M, Torrent C, Reinares M, et al. Validity and reliability of the Func-tioning Assessment Short Test (FAST) in bipolar disorder. Qin Pract Epidemiol Ment Health. 2007;3:5.
- Posa AR, Bonnin CM, Mazzarini L, Amann B, Kapczinski F, Vieta E. Predictoresclínicos del funcionamiento interpersonal en pacientes bipolares. Pev Psiquiatr Salud Ment (Barc). 2009;2:83

  –8.
- Colom F, Vieta E, Martínez-Arán A, Peinares M, Benabarre A, Gastó C. Clinical factors associated with treatment noncompliance in euthymic bipolar patients. J Clin Psychiatry. 2000;61:549-55.
- Vieta E. New guidelines for bipolar disorders. World J Biol Psychiatry. 2009;10:82

  –4.
- 46. Grunze H, Vieta E, Goodwin GM, Bowden C, Licht RW, Moller HJ, et al. The World Federation of Societies of Biological Psychia- try (WFSBP) guidelines for the biological treatment of bipolar disorders: update 2009 on the treatment of acute mania. World J Biol Psychiatry. 2009;10:85—116.
- 47. Goodwin G, Fleischhacker W, Arango C, Baumann P, Davidson M, De Hert M, et al. Advantages and disadvantages of combination treatment with antipsychotics ECNP Consensus Meeting, March 2008. Nice Eur Neuropsychopharmacol. 2009;19:520—32.
- 48. Yatham LN, Kennedy SH, Schaffer A, Parikh SV, Beaulieu S, O'Donovan C, et al. Canadian Network for Mood and Anxiety Treatments (CANMAT) and International Society for Bipolar Disorders (ISBD) collaborative update of CANMAT guidelines for the management of patients with bipolar disorder: update 2009. Bipolar Disord. 2009;11:225—55.
- 49. Grunze H, Vieta E, Goodwin GM, Bowden C, Licht RW, Möller HJ, et al., WFSBP Task Force On Treatment Guidelines For Bipolar Disorders. The World Federation of Societies of Biological Psychiatry (WFSBP) Guidelines for the Biological Treatment of Bipolar Disorders: Update 2010 on the treatment of acute bipolar depression. World J Biol Psychiatry. 2010; 11:81—109.
- 50. Vieta E, Murru A, Pueyo MJ. Guia sobre el maneig del trastorn bipolar a Catalunya. Barcelona: Agència d'Informació, Avaluació i Qualitat en Salut. Servei Català de la Salut. Departament de Salut. Generalitat de Catalunya; 2010.
- Nivoli AM, Colom F, Murru A, Pacchiarotti I, Castro-Loli P, González-Pinto A, et al. New treatment guidelines for acute bipolar depression: A systematic review. J Affect Disord. 2010 Jun 8. [Epub ahead of print].
- Vieta E. The European Network for Bipolar Disorder. ECNP matters, 2008;14. Available from: http://matters.ecnp.nl/ number14/network.shtml.
- Vieta E. Progress in research at the CIBERSAM's affective disorders programme of the University of Barcelona Hospital Clinic. Eur J Psychiat. 2009;23 Suppl 1:174—80.
- 54. Tabarés-Seisdedos R, Escámez T, Martínez-Giménez JA, Balanzá V, Salazar J, Selva G, et al. Variations in genes regulating neuronal migration predict reduced prefrontal cognition in schizophrenia and bipolar subjects from mediterranean Spain: a preliminary study. Neuroscience. 2006;139:1289—300.
- Mur M, Portella MJ, Martínez-Arán A, Pifarré J, Vieta E. Persistent neuropsychological deficit in euthymic bipolar patients: executive function as a core deficit. J Clin Psychiatry. 2007;68:1078—86.
- González-Pinto A, Vega P, Ibáñez B, Mosquera F, Barbeito S, Gutiérrez M, et al. Impact of cannabis and other drugs on age at onset of psychosis. J Clin Psychiatry. 2008;69:1210—6.
- 57. De Dios C, Ezquiaga E, Garcia A, Soler B, Vieta E. Time spent with symptoms in a cohort of bipolar disorder outpatients in

- Spain: Aprospective, 18-month follow-up study. J Affect Disord. 2009 Dec 23. [Epub ahead of print].
- Avila CC, Cabello M, Cieza A, Vieta E, Ayuso-Mateos JL. Functioning and disability in bipolar disorders: a systematic review of literature using the ICF as a reference. Bipolar Disord. 2010 Aug; 12:473

  –82.
- Fountoulakis KN, Vieta E, Sanchez-Moreno J, Kaprinis SG, Goikolea JM, Kaprinis GS. Treatment guidelines for bipolar disorder: a critical review. J Affect Disord. 2005;86: 1—10.
- Angst J, Adolfsson R, Benazzi F, Gamma A, Hantouche E, Meyer TD, et al. The HCL-32: towards a self-assessment tool for hypomanic symptoms in outpatients. J Affect Disord. 2005; 88:217—33
- Henry C, M Baïlara K, Poinsot R, Casteret AA, Sorbara F, Leboyer M, et al. Evidence for two types of bipolar depression using a dimensional approach. Psychother Psychosom. 2007;76: 325—31.
- Martinez-Aran A, Scott J, Colom F, Torrent C, Tabares-Seisdedos R, Daban C, et al. Treatment nonadherence and neurocognitive impairment in bipolar disorder. J Clin Psychiatry. 2009:70:1017—23
- 63. Posa AR, Cruz N, Franco C, Haro JM, Bertsch J, Reed C, et al. Why do clinicians maintain antidepressants in some patients with acute mania? Hints from the European Mania in Bipolar Longitudinal Evaluation of Medication (EMBLEM), a large naturalistic study. J Clin Psychiatry. 2010 Mar 23. [Epub ahead of print].
- 64. Forcada I, Papachristou E, Mur M, Christodoulou T, Jogia J, Peichenberg A, et al. The impact of general intellectual ability and white matter volume on the functional outcome of patients with Bipolar Disorder and their relatives. J Affect Disord. 2010 Nov 26. [Epub ahead of print].
- 65. Calabrese JR, Vieta E, B-Mallakh R, Findling RL, Youngstrom EA, Bhaj O, et al. Mood state at study entry as predictor of the polarity of relapse in bipolar disorder. Biol Psychiatry. 2004;56:957—63.
- Kapczinski F, Vieta E, Andreazza AC, Frey BN, Gomes FA, Tramontina J, et al. Allostatic load in bipolar disorder: implications for pathophysiology and treatment. Neurosci Biobehav Pev. 2008;32:675—92.
- 67. Salvatore P, Baldessarini RJ, Tohen M, Khalsa HM, Sanchez-Toledo JP, Zarate Jr CA, et al. McLean-Harvard International First-Episode Project: two-year stability of DSM-IV diagnoses in 500 first-episode psychotic disorder patients. J Clin Psychiatry. 2009;70:458—66.
- Mazzarini L, Pacchiarotti I, Colom F, Sani G, Kotzalidis GD, Rosa AR, et al. Predominant polarity and temperament in bipo- lar and unipolar affective disorders. J Affect Disord. 2009 Dec:119:28—33.
- Berk M, Hallam K, Malhi GS, Henry L, Hasty M, Macneil C, et al. Evidence and implications for early intervention in bipolar disorder. J Ment Health. 2010;19:113

  26.
- López-Jaramillo C, Lopera-Vásquez J, Ospina-Duque J, García J, Gallo A, Cortez V, et al. Lithium treatment effects on the neu-ropsychological functioning of patients with bipolar I disorder. J Clin Psychiatry. 2010 Mar 23. [Epub ahead of print].
- 71. Yildiz A, Vieta E, Leucht S, Baldessarini RJ. Efficacy of antimanic treatments: meta-analysis of randomized, controlled trials. Neuropsychopharmacology. 2011 Jan;36:375—89.
- 72. Vieta E. Psychiatry: from interest in conflicts to conflicts of interest. World Psychiatry. 2007;6:27—9.
- Colom F, Vieta E. The need for publishing the silent evidence from negative trials. Acta Psychiatr Scand. 2011 Feb;123: 91—4