M. Bauer

Differences between bipolar disorder and schizophrenia in the early phases of the illness

Department of Psychiatry and Psychotherapy
University Hospital Carl Gustav Carus
Technische Universität Dresden
Dresden (Germany)

Schizophrenia and bipolar disorder (BPD) belong to the most severe mental disorders that share many similarities, e.g. a lifetime prevalence of about 1%. Both disorders are associated with a recurrent, chronic course, insufficient clinical response, and functional disability in a substantial number of patients. Furthermore, both disorders have their typical onset early in life (>50% of patients report their illness onset prior age of 19) and there is empirical evidence for a long undetected early course. A lag between symptom onset and first diagnosis and treatment lasts typically several years, therefore, a significant functional impairment renders early identification and intervention a vital role.

Reports of prevalence rates for bipolar disorders vary, in part due to methodological limitations (e.g., use of different diagnostic instruments, untrained interviewers, etc.), and in part because of the diagnostic criteria applied. In the past, milder forms of bipolar disorder, which today are included in the «bipolar spectrum», were disregarded in the diagnostic process. When one considers the whole bipolar spectrum lifetime prevalence rates rise to 2.8 and even 6.5 percent (Hauser et al., 2007).

In contrast to adult-onset BPD, early-onset BPD has not been studied as extensively, although 60%-65% of people with BPD experience their first symptom onset before adulthood (Lish et al., 1994) (table 1). Further, early-onset BPD is more severe, treatment-refractory, and is associated with more functional impairment relative to adult-onset BPD (Perlis et al., 2004). Youth with BPD have more psychiatric comorbidities, such as substance use and anxiety disorders, attention deficit-hyperactivity disorder (ADHD), oppositional defiant disorder (ODD) and conduct disorder (CD), further contributing to poor outcomes.

The early recognition of mental disorders is a burning issue in clinical research. This is particularly important for bipolar disorders as they are often diagnosed only years after the onset of the illness. Such late recognition of the illness has far-reaching consequences for patients suffering from bipolar disorder. In contrast to schizophrenia, early identification and prevention research in the bipolar prodrome (for a definition of illness prodrome) (fig. 1) has focused largely on children of bipolar patients. Studies in «bipolar offspring» found significant psychopathology (e.g., depression) but low conversion rates to bipolar disorder (0%-13%).

In schizophrenia, development of specific rating tools in the clinical prodrome of schizophrenia yielded encouraging results regarding the potential to reduce pre-illness symptom manifestations and progression to full disorder (Klosterkötter et al., 2001). Rates of conversion from prodromal to full psychotic states range from 15%-40% over 1-2 years. Specific interventions in people at very high risk for development of psychosis have resulted in improvement of attenuated psychotic symptoms and reduced conversion to psychosis (Mc Gorry et al. 2002).

Table 1 **Age at first signs of illness results of a retrospective survey among patients with bipolar disorder (n = 500)**

Age (years)	%	n
Below 5	5	(25)
5 to 9	12	(59)
10 to 14	14	(71)
15 to 19	28	(140)
20 to 24	15	(77)
25 to 29	9	(47)
30 and older	10	(81)

Question: «Looking back to the time before you were diagnosed as having bipolar illness, please indicate, using yor best estimate, the age you were when you now believe you fi exhibited signs of the illness». Lish et al., 1994.

Correspondence:
Michael Bauer
Department of Psychiatry and Psychotherapy
University Hospital Carl Gustav Carus
Technische Universität Dresden
Dresden (Germany)
E-mail: michael.bauer@uniklinikum-dresden.de

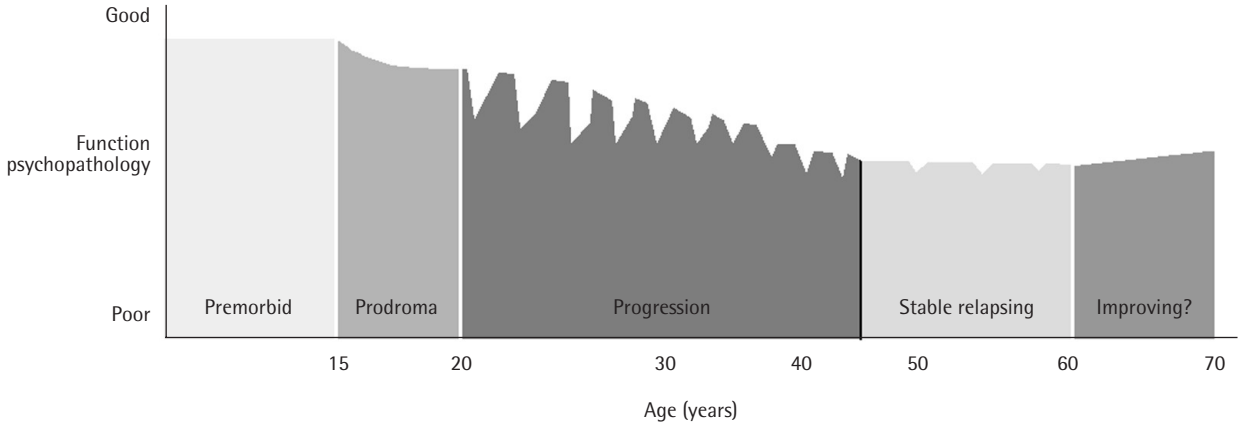

Figura 1 *Definition of illness prodrome. Phase of first dynamic changes in behavior and mental state. Situated between stable, premorbid abnormalitites and the first syndromal episode of a disorder. Tools: retrospective characterization of a prodrome and subsequent development of specific prodrome.*

In contrast to schizophrenia where emerging data support the benefits of treatment before full psychotic symptoms have emerged, there has been relatively little research towards early clinical identification and intervention in BPD (Correll and Kane, 2004). This general lack of such efforts can be explained by the fact that, different from psychosis research, the presence of a mania prodrome has not been generally accepted or recognized having hindered the development of early symptom detection programs. A manic and depressive prodrome has been defined as the early cognitive, affective and behavioral symptoms of the illness occurring before the first (full) affective episode. It has been found that at least 80% of patients with bipolar disorder experience 1 or more prodromal symptoms, and that early signs of mania are easier detectable than signs of depression. The most frequent prdrome symptoms in bipolar disorder are according to Jackson et al. 2003:

1. Bipolar depression:
   - Mood change: 48%.
   - Psychomotor symptoms: 41%.
   - Increased anxiety: 36%.
   - Appetite change: 36%.
   - Suicidal ideas/intent: 29%.
   - Sleep disturbance: 24%.
2. Mania:
   - Sleep disturbance: 77%.
   - Psychotic symptoms: 47%.
   - Mood change: 43%.
   - Psychomotor symptoms: 34%.
   - Appetite change: 20%.

In summary, in both schizophrenia and bipolar disorder a prodrome exists, but its likely longer in schizophrenia. Schizophrenia and mania prodrome characteristics overlap considerably. The phenotypic overlap requires the concurrent study of both illness prodromes and prospective trials are urgently needed (high-risk populations and epidemiological community samples) in conjunction with child and adolescent psychiatrists.

REFERENCES

Correll CU, Kane JM. The psychotic prodrome: how effective are early interventions? Advances in Schizophrenia and Clinical Psychiatry 2004;1:2-10.

Hauser M, Pfennig A, Özgürdal S, Heinz A, Bauer M, Juckel G. Early recognition of bipolar disorder. Eur Psychiatry 2007;22:92-8.

Jackson A, Cavanagh J, Scott J. A systematic review of manic and depressive prodromes. J Affect Disord 2003;74:209-17.

Klosterkötter J, Hellmich M, Steinmeyer EM, Schultze-Lutter F. Diagnosing schizophrenia in the initial prodromal phase. Arch Gen Psychiatry 2001;58:158-64.

Lish JD, Dime-Meenan S, Whybrow PC, Price RA, Hirschfeld RM. The National Depressive and Manic-depressive Association (DMDA) survey of bipolar members. J Affect Disord 1994;31:281-94.

McGorry PD, Yung AR, Phillips LJ. Randomized controlled trial of interventions designed to reduce the risk of progression to first-episode psychosis in a clinical sample with subthreshold symptoms. Arch Gen Psychiatry 2002;59:921-8.

Perlis RH, Miyahara S, Marangell LB. Long-Term implications of early onset in bipolar disorder: data from the first 1000 participants in the systematic treatment enhancement program for bipolar disorder (STEP-BD). Biol Psychiatry 2004;55:875-81.