The Importance of Accurate Diagnosis in Mental Illness and Strategies to Improve Treatment Adherence

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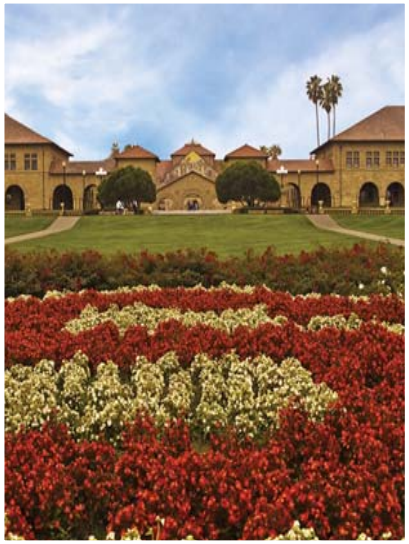
None

Learning Objectives:

1. Discuss some of the major challenges in diagnosing mental illness (e.g., unipolar major depression versus depression in a bipolar individual).
2. State the importance of early detection of mental illness and the impact of early intervention on mortality and disability outcomes.
3. Identify challenges that contribute to treatment non-adherence, and strategies that may be employed to improve compliance.

Major challenges in diagnosing mental illness



"I'm going to be late, dear. It's total craziness here."

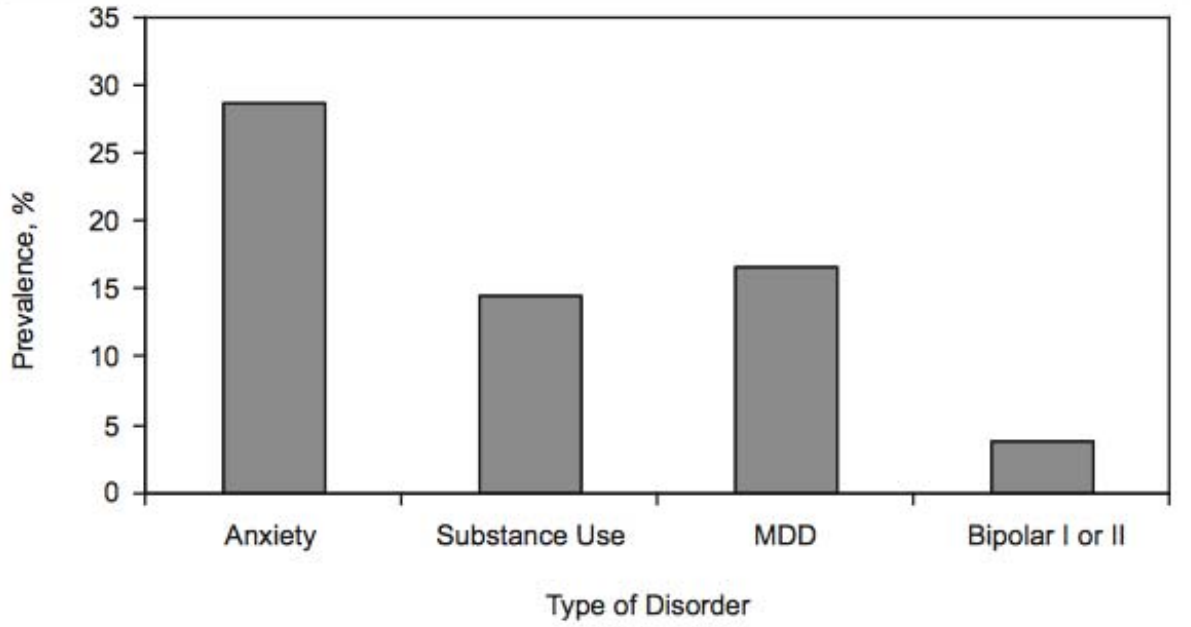
Background

- Bipolar disorder refers to a group of affective disorders, which together are characterized by depressive and manic or hypomanic episodes. These disorders include:
  - bipolar disorder type I
  - bipolar disorder type II
  - cyclothymic disorder
  - bipolar disorder not otherwise specified
- Unipolar depression (single or recurrent depressive episodes).

More background…

- No current objective biomarkers that differentiate between bipolar disorder and unipolar depression.
- Neuroimaging studies do not reveal a clear boundary between these disorders; they might be better represented as a continuum of affective disorders.

Figure 1. Lifetime Prevalence of Major Psychiatric Disorders



Data are from a nationally representative face-to-face household survey conducted between February 2001 and April 2003 using the fully structured World Health Organization World Mental Health Survey version of the Composite International Diagnostic Interview.

n = 9282, age 18 years or older.

MDD = major depressive disorder.

Data from Kessler et al.[10]

Differentiating Bipolar Depression from Unipolar Depression

- High “miss” rate even among psychiatrists
- Prediction is a retrospective effort:
  - The depressive phase of bipolar disorder appears identical to unipolar depression.
  - Patients with bipolar disorder tend to spend a far larger proportion of their time in a depressive phase than in the manic phase or may not yet have experienced a manic or hypomanic episode

Differentiating Bipolar Depression from Unipolar Depression

Importance of accurate diagnosis

1. Delay in appropriate treatment
2. Risk of prescribing an antidepressant without a mood stabilizer, as most patients are misdiagnosed with major depressive disorder (unipolar depression).
   a. In a naturalistic study of bipolar disorder patients misdiagnosed with unipolar depression, 55% of those who received an antidepressant developed a manic or hypomanic episode.*
3. The longer bipolar disorder stays untreated, the more difficult it becomes to treat, and the greater the risk for suicide.

*Ghaemi SN, Boiman EE, Goodwin FK. Diagnosing bipolar disorder and the effect of antidepressants: a naturalistic study . J Clin Psychiatry . 2000;61(10):804-808.

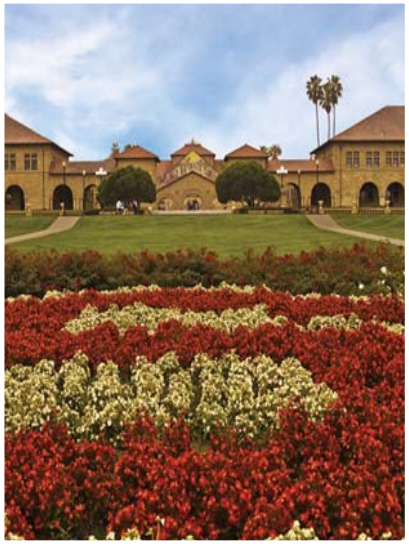
Differentiating Bipolar Disorder from Unipolar Depression

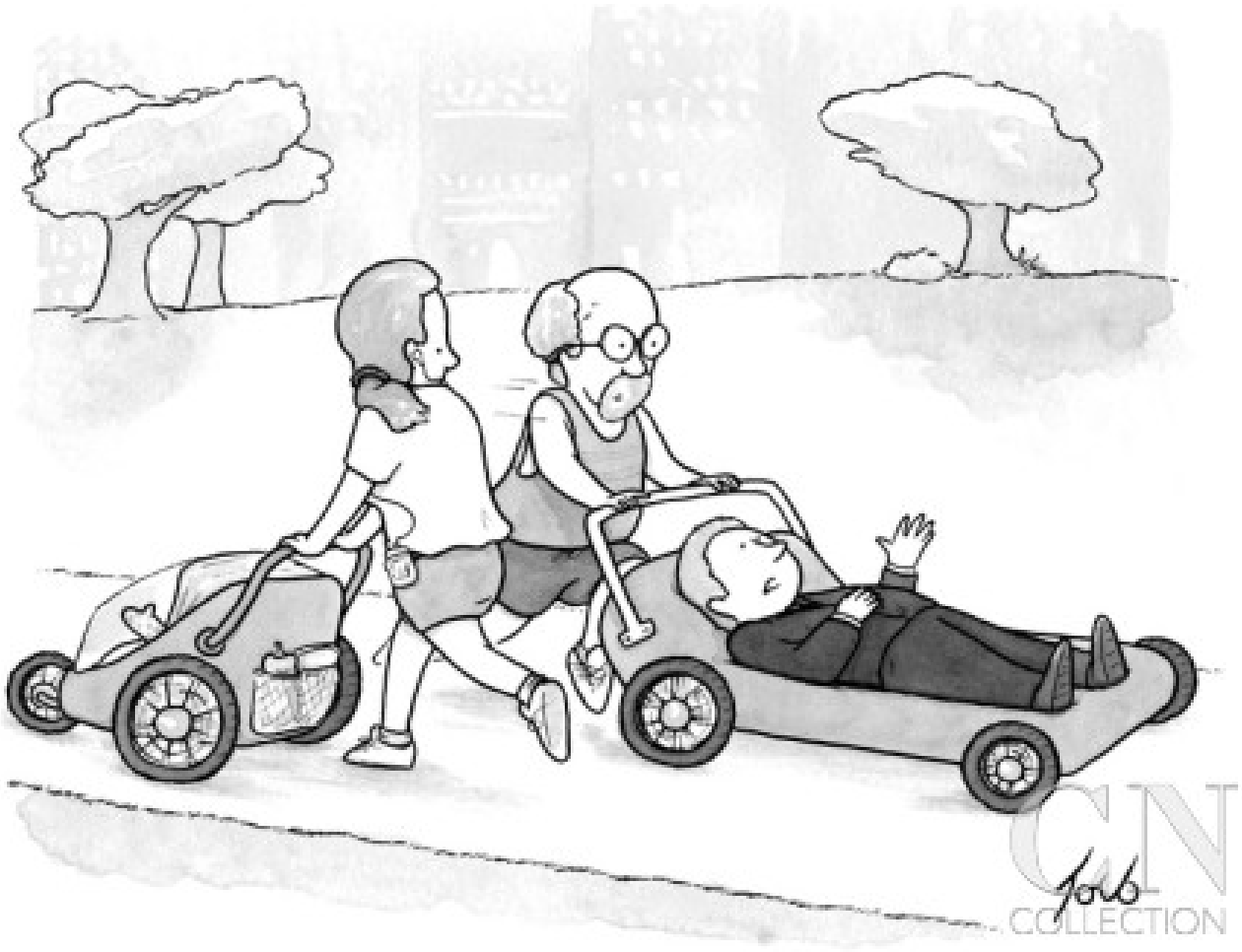
Signs depression might be a “bipolar” depression:

- Most studies have found no differences between unipolar and bipolar depression
- Compared to unipolar depression, bipolar depression appears associated with a younger age of onset, more frequent episodes, greater amount of irritability, and mood swings
- No consistent differences have been found between episode length, although some studies suggest a shorter episode length of bipolar depressions compared to unipolar depressions.
- Depression severity appears comparable between bipolar and unipolar disorders.
- Unipolar depression is associated with more prevalent anxious mood states, activity, and somatization

Amy K. Cuellar, Sheri L. Johnson, and Ray Winters. Distinctions between bipolar and unipolar depression. Clin Psychol Rev. May 2005; 25(3): 307–339

Why is early detection important?

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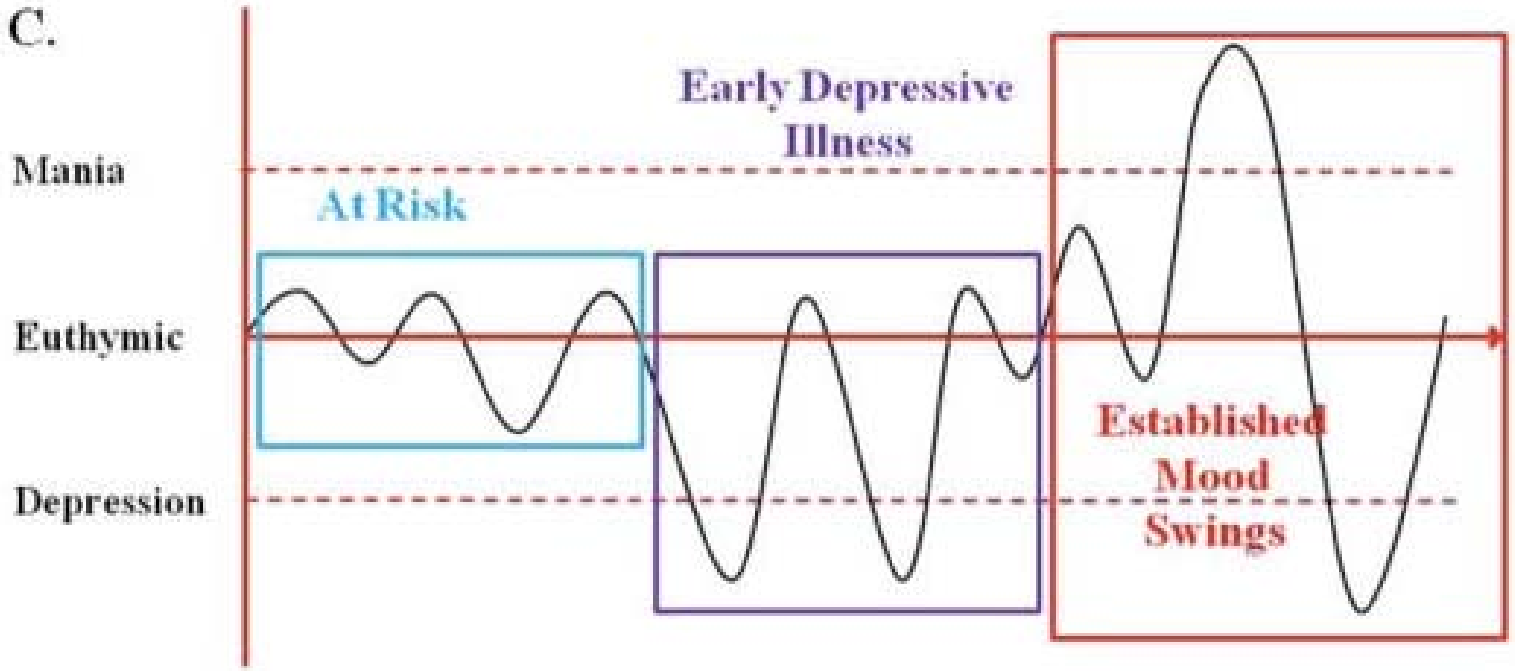
Naturalistic Progression of Bipolar Disorder



Research on Mood Disorder Outcomes

Childhood bipolar disorder usually has a poorer prognosis with long delays to first treatment. Such patients report more episodes, more comorbidities, and rapid cycling and demonstrate severe mania, depression, and fewer days well.

G.S. Leverich, R.M. Post, P.E. Keck Jr., L.L. Altshuler, M.A. Frye, R.W. Kupka, et al. The poor prognosis of childhood-onset bipolar disorder. J Pediatr, 150 (2007), pp. 485–490

Data consistently indicated that between 70% and 100% of children and adolescents with bipolar disorder recover from their index episode, however, up to 80% experience multiple recurrences.

B. Birmaher, D. Axelson. Course and outcome of bipolar spectrum disorder in children and adolescents: a review of the existing literature. Dev Psychopathol, 18 (2006), pp. 1023–1035

Research on Mood Disorder Outcomes

Both poor functioning and psychosocial adjustment before the onset of the illness predict worse outcome of bipolar disorder.

S.M. Tsai, C. Chen, C. Kuo, J. Lee, H. Lee, S.M. Strakowski. 15-year outcome of treated bipolar disorder. J Affect Disord, 63 (2001), pp. 215–220

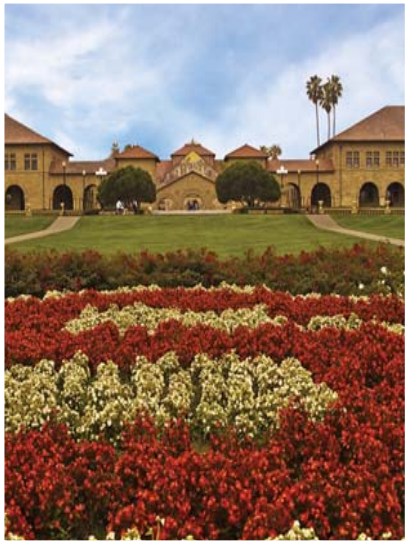
Initial lithium therapy within the first 10 years of onset of bipolar disorder might be more promising than prophylaxis in later life. Similarly, maintenance therapy also appears to be more effective early in the course of bipolar disorder. Early-stage patients had significantly lower rates of relapse and recurrence of manic/mixed episodes with treatment.

T.A. Ketter, J.P. Houston, D.H. Adams, R.C. Risser, A.L. Meyers, D.J. Williamson, et al. Differential efficacy of olanzapine and lithium in preventing manic or mixed recurrence in patients with bipolar I disorder based on number of previous manic or mixed episodes. J Clin Psychiatry, 67 (2006), pp. 95–101

Summary: natural course of mood disorders

- Mood Disorders are recurrent; the majority of patients will have more than one episode over a lifetime.
- Left untreated, patients tend to have episodes closer and closer together over time.
- Left untreated, episodes tend to be more severe over time and result in loss of brain tissue and psychosocial well-being.
- Left untreated, later episodes tend to be more refractory to standard treatments, necessitating polypharmacy and thereby increasing the risks of side effects, poor compliance, and drug interactions.

Why are patients non-adherent to treatment, and how to improve compliance?




REVEY

Factors involved in poor compliance

- adverse effects
- poor instructions
- inability to pay for medications
- poor relationship between patient and health-care provider
- polypharmacy
- lack of confidence in the effectiveness of the treatment
- denial of the condition
- regimen complexity

Improving Patient Treatment Adherence; A Clinician's Guide; Editor: Hayden Bosworth, Springer Publishing, NY, 2010

Recommendations to improve medication adherence

- Patient education on the disease, treatment, and medication side effects
- Identifying medication non-adherence
  - missed appointments
  - refill frequency
- Combined use of written and verbal instruction
  - clear communication,
  - development of treatment plan,
  - make direct eye contact
  - assess concerns
- Shared decision making
- Simplify medication regimen whenever possible
- Involve family members when ever possible

Improving Patient Treatment Adherence; A Clinician's Guide; Editor: Hayden Bosworth, Springer Publishing, NY, 2010

Expeditious use of time in the patient encounter

Consider the use of forms, diaries, apps and questionnaires to extend the clinical encounter

Mood Disorder Questionnaire (MDQ) , a 17-question screening tool for bipolar disorder.

Patient Health Questionnaire-9 (PHQ-9) assesses how often respondents have experienced various symptoms (such as feeling down, sleep problems, thoughts of harming oneself) in the previous two weeks.

T2 Mood Tracker app: reminds individual to track symptoms of anxiety, depression, well-being, PTSD, stress, customizable fields. Can graph or generate reports and share with others.

Expeditious use of time in the patient encounter

But beware, the use of surveys can lead to an over prescription of anti-depressants.

Use of the questionnaires, increased the likelihood that patients who were not likely to be depressed would receive depression treatment (odds ratio 3.2; 95% confidence interval 1.1-9.2).

Jerant A et al, *J Am Board Fam Med* 2014;27(5);611–620

Perhaps a better role for surveys is tracking progress once the diagnosis is confirmed.

Thank you