Ten-Year Course of Borderline Personality Disorder

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Borderline Personality Disorder (BPD) Is Now Seen as a Valid Disorder

- According to the criteria of Robins and Guze (1970)
  - It can be delimited from other psychiatric disorders
  - Something of its etiology (both environmental and biological) is known
  - It "runs" in families
  - It has a complex but increasingly known course

Robins E, Guze SB. *Am J Psychiatry.* 1970;126:983-987.

Borderline Personality Disorder Is Now Recognized as a Common Disorder

- 1.8% of American adults meet criteria for BPD (range 1.6-5.9%)
- About as common as bipolar I disorder
- More common than schizophrenia

APA. *DSM-IV-TR*; 2000.

Continuum of Borderline Psychopathology

- Some people with BPD recover spontaneously and are never patients
- Some use nonintensive outpatient treatment and are never hospitalized
- Others become severely ill and use large amounts of mental health services, including repeated inpatient stays

Continuum of Borderline Psychopathology (cont.)

- The latter group has defined BPD for generations of clinicians
- Until very recently, most research studies have focused on inpatient-level patients
- This presentation deals with this type of severely ill patient

McLean Study of Adult Development (MSAD)

- First NIMH-funded prospective study of the longitudinal course of BPD
- 362 McLean inpatients assessed at baseline
- 8 waves of blind follow-up are complete: 2, 4, 6, 8, 10, 12, 14, and 16-year data
- 18-year wave began in July of 2010
- 20-year wave began in July of 2012

Subjects

- 290 patients meeting DIB-R and DSM-III-R criteria for BPD
- 72 axis II comparison subjects meeting DSM-III-R criteria for another personality disorder (but neither study criteria set for BPD)

DIB-R=Revised Diagnostic Interview for Borderlines.

DIB-R: Sectors of Psychopathology

- Dysphoric affect
- Disturbed cognition
- Impulsive behaviors
- Troubled relationships

Zanarini MC, et al. *J Pers Disord.* 1989;3:10-18.

DIB-R: Definition of Borderline Personality Disorder

- Symptoms in each of these 4 domains of borderline psychopathology must be present at the same time
- Results in a somewhat smaller and more homogeneous group of patients than DSM criteria

Zanarini MC, et al. *J Pers Disord.* 1989;3:10-18.

Earlier Studies of Course of Borderline Personality Disorder

- 17 small-scale, prospective studies of the short-term course of BPD
  - Patients with BPD do poorly in the short-run
- 4 large-scale, follow-back studies of the long-term course of BPD
  - McGlashan: Chestnut Lodge
  - Stone: New York State Psychiatric Institute
  - Paris: Jewish General Hospital in Montreal
  - Plakun: Austin Riggs
  - Patients with BPD do substantially better in the long-run

Limitations of Earlier Studies

- Use of chart review or clinical interviews to diagnose BPD
- No comparison group or the use of less than optimal comparison subjects
- Reliance on small size samples with high attrition rates

Limitations of Earlier Studies (cont.)

- Only very basic data collected at baseline and follow-up
- Typically, only 1 postbaseline reassessment
- Nonblind postbaseline assessments
- Variable number of years of follow-up in the same study

MSAD Subject Retention at 10-year Follow-up

- 92% of surviving patients with BPD still participating
- 85% of surviving axis II comparison subjects still participating

Time-to-Symptomatic Remission*

2-Year Follow-Up %	4-Year Follow-Up %	6-Year Follow-Up %	8-Year Follow-Up %	10-Year Follow-Up %
34.9	55.2	75.6	87.6	93.0

*Remission defined as no longer meeting either criteria set for BPD (DIB-R and DSM-III-R) for two years.
Adapted from: Zanarini MC, et al. *Am J Psychiatry.* 2010;167:663-667.

Time-to-Sustained Symptomatic Remission*

4-Year Follow-Up %	6-Year Follow-Up %	8-Year Follow-Up %	10-Year Follow-Up %
29.6	46.9	67.1	86.0

*Sustained remission defined as no longer meeting either criteria set for BPD (DIB-R and DSM-III-R) for four years.

Adapted from: Zanarini MC, et al. *Am J Psychiatry.* 2010;167:663-667.

Time-to-Symptomatic Recurrence*

2 years after 1st remission %	4 years after 1st remission %	6 years after 1st remission %	8 years after 1st remission %
16.5	22.4	27.4	29.5

*Recurrence defined as meeting the study criteria for BPD for two years after meeting the criteria for remission in a previous follow-up period.

Adapted from: Zanarini MC, et al. *Am J Psychiatry.* 2010;167:663-667.

Time-to-Loss of Sustained Remission*

2 years after 1st remission %	4 years after 1st remission %	6 years after 1st remission %
6.9	12.8	15.4

*Loss of sustained remission defined as meeting the study criteria for BPD for two years after meeting the criteria for sustained remission in a previous follow-up period.
Adapted from: Zanarini MC, et al. *Am J Psychiatry.* 2010;167:663-667.

Completed Suicide

2-Year Follow-Up %	4-Year Follow-Up %	6-Year Follow-Up %	8-Year Follow-Up %	10-Year Follow-Up %	Total Follow-Up %
1.7 (N=5)	1.4 (N=4)	0.7 (N=2)	–	0.3 (N=1)	4.1 (N=12)

Adapted from: Zanarini MC, et al. *Am J Psychiatry.* 2010;167:663-667.

Complex Model of Borderline Psychopathology

- Hyperbolic temperament is the outward “face” of the neurobiological dimensions that underlie borderline psychopathology
- After “kindling” of some kind, acute and temperamental symptoms develop

Adapted from: Zanarini MC, et al. *Am J Psychiatry.* 2007;164:929-935.

Acute Symptoms

- Resolve relatively quickly
- Are the best markers for the disorder
- Are often the main reason for expensive forms of psychiatric care, such as inpatient stays
- Are akin to the positive symptoms of schizophrenia

Adapted from: Zanarini MC, et al. *Am J Psychiatry.* 2007;164:929-935.

Temperamental Symptoms

- Resolve relatively slowly
- Are not specific to BPD
- Are associated with ongoing psychosocial impairment
- Are akin to the negative symptoms of schizophrenia

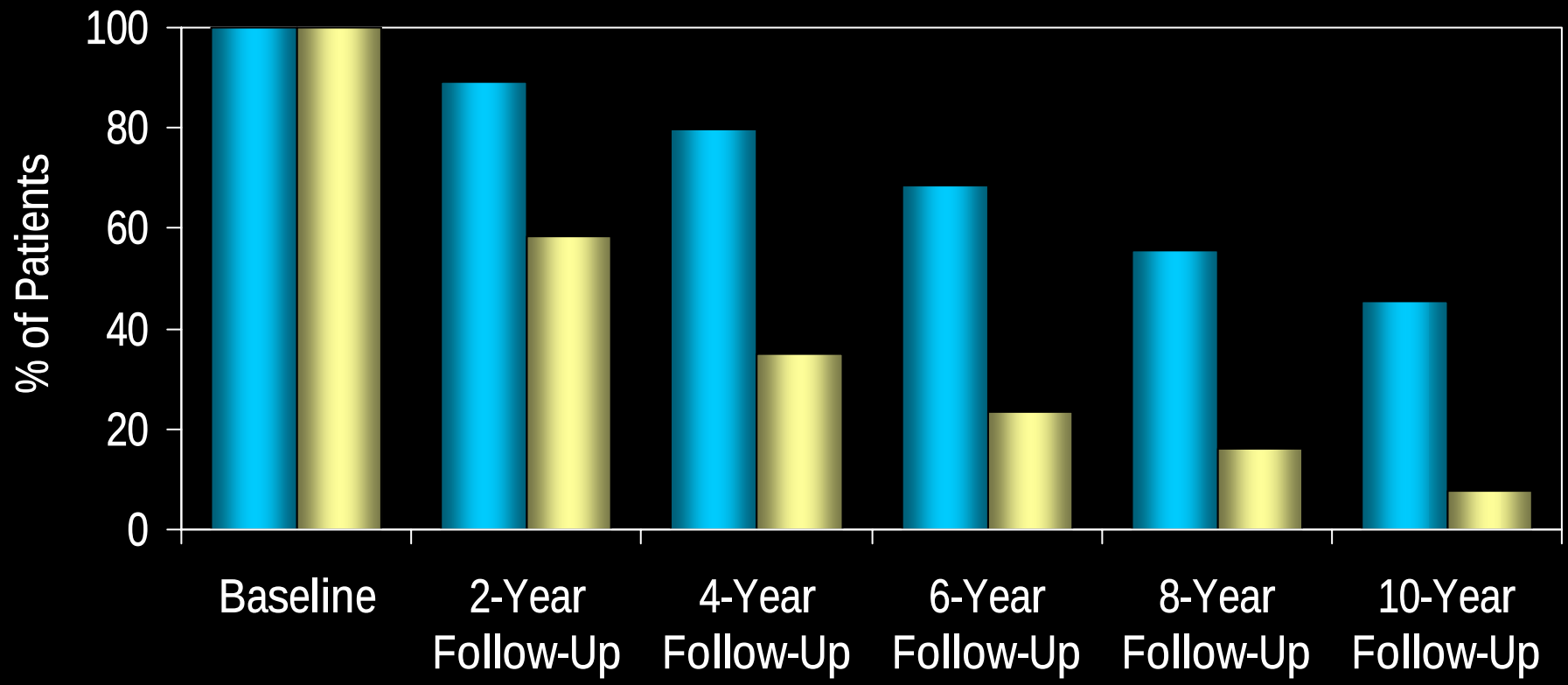
Adapted from: Zanarini MC, et al. *Am J Psychiatry.* 2007;164:929-935.

Examples of Symptoms

- Acute symptoms: self-mutilation, suicide efforts, quasi-psychotic thoughts
- Temperamental symptoms: angry feelings and acts, distrust and suspiciousness, abandonment concerns

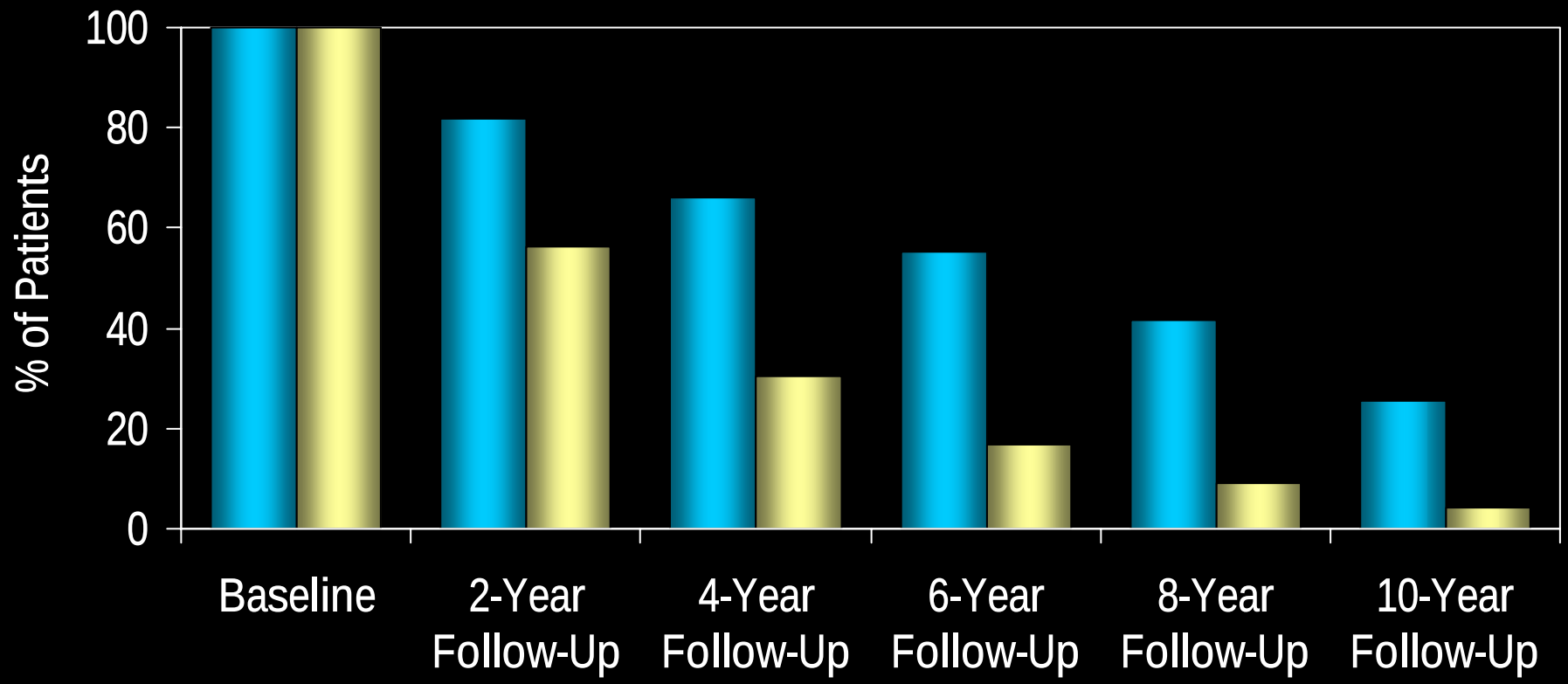
Adapted from: Zanarini MC, et al. *Am J Psychiatry.* 2007;164:929-935.

Time-to-Remission of Chronic Anger and Self-mutilation



Adapted from: Zanarini MC, et al. *Am J Psychiatry.* 2007;164:929-935.

Time-to-Remission of Intolerance of Aloneness and Suicide Efforts



Adapted from: Zanarini MC, et al. *Am J Psychiatry.* 2007;164:929-935.

Course of 24 BPD Symptoms Studied

- Using two different methods of defining acute and temperamental symptoms among borderline patients
  - 12 symptoms were found to be acute in nature
  - And 12 symptoms were found to be temperamental in nature

Adapted from: Zanarini MC, et al. *Am J Psychiatry.* 2007;164:929-935.

Acute Symptoms I

- Affective Symptoms
  - Affective instability
- Cognitive Symptoms
  - Quasi psychotic thought
  - Serious identity disturbance
- Impulsive Symptoms
  - Substance abuse
  - Promiscuity
  - Self-mutilation
  - Suicide efforts

Adapted from: Zanarini MC, et al. *Am J Psychiatry.* 2007;164:929-935.

Acute Symptoms II

- Interpersonal Symptoms
  - Stormy relationships
  - Devaluation/manipulation/sadism
  - Demandingness/entitlement
  - Serious treatment regressions
  - Countertransference problems/"special" treatment relationships

Adapted from: Zanarini MC, et al. *Am J Psychiatry.* 2007;164:929-935.

Temperamental Symptoms I

- Affective Symptoms
  - Depression
  - Helplessness/hopelessness/worthlessness
  - Anger
  - Anxiety
  - Loneliness/emptiness
- Cognitive Symptoms
  - Odd thought (e.g., overvalued ideas)/unusual perceptual experiences (e.g., depersonalization)
  - Nondelusional paranoia

Adapted from: Zanarini MC, et al. *Am J Psychiatry.* 2007;164:929-935.

Temperamental Symptoms II

- Impulsive Symptoms
  - Other forms of impulsivity (e.g., eating binges, spending sprees, reckless driving)
- Interpersonal Symptoms
  - Intolerance of aloneness
  - Abandonment/engulfment/annihilation concerns
  - Counterdependency
  - Undue dependency/masochism

Adapted from: Zanarini MC, et al. *Am J Psychiatry.* 2007;164:929-935.

Symptoms That Resolve Most Rapidly

- Those reflecting core areas of impulsivity (e.g., self-mutilation, suicide efforts)
- Active attempts to manage interpersonal difficulties (e.g., stormy relationships, devaluation/manipulation/sadism)

Adapted from: Zanarini MC, et al. *Am J Psychiatry.* 2007;164:929-935.

Most Stable Symptoms

- Affective symptoms reflecting areas of chronic dysphoria (e.g., anger, loneliness/emptiness)
- Interpersonal symptoms reflecting abandonment and dependency issues (e.g., intolerance of aloneness, counter-dependency problems)

Adapted from: Zanarini MC, et al. *Am J Psychiatry.* 2007;164:929-935.

Clinical Implications of Symptomatic Findings I

- There are five empirically-based comprehensive forms of therapy for BPD
  - Dialectical Behavioral Therapy (DBT): Linehan
  - Mentalization-based Treatment (MBT): Bateman and Fonagy
  - Transference-focused Psychotherapy (TFP): Kernberg
  - Schema-focused Therapy (SFT): Young
  - General Psychiatric Management (GPM): McMain and Links

Adapted from: Zanarini MC, et al. *Am J Psychiatry.* 2007;164:929-935.

Clinical Implications of Symptomatic Findings II

- All five of these treatments are aimed at acute symptoms
- Treatments aimed at temperamental symptoms need to be developed

Adapted from: Zanarini MC, et al. *Am J Psychiatry.* 2007;164:929-935.

Broadly-defined Good Psychosocial Functioning

- 78% of patients with BPD attain or maintain broadly-defined good psychosocial functioning over the course of 10 years of prospective follow-up
  - This goal is defined as at least 1 emotionally sustaining relationship with a friend or romantic partner **and**
  - Both a good vocational performance and a sustained vocational history

Adapted from: Zanarini MC, et al. *Acta Psychiatr Scand.* 2010;122:103-109.

Narrowly-defined Good Psychosocial Functioning

- 64% of patients with BPD attain or maintain narrowly-defined good psychosocial functioning over the course of 10 years of prospective follow-up
  - This goal is defined as at least 1 emotionally sustaining relationship with a friend or romantic partner **and**
  - A good vocational performance, a sustained vocational history, **and** full-time vocational engagement

Adapted from: Zanarini MC, et al. *Acta Psychiatr Scand.* 2010;122:103-109.

Stability of Good Psychosocial Functioning Over Time

- Broadly-defined good psychosocial functioning is more stable than narrowly-defined good psychosocial functioning

Adapted from: Zanarini MC, et al. *Acta Psychiatr Scand.* 2010;122:103-109.

Sectors of Good Psychosocial Functioning Over Time

- Almost all failures to attain or actual losses of narrowly-defined good psychosocial functioning were due to problems in the vocational and not the social realm

Adapted from: Zanarini MC, et al. *Acta Psychiatr Scand.* 2010;122:103-109.

Psychosocial Functioning of Axis II Comparison Subjects

- 93% maintained or attained broadly-defined good psychosocial functioning
- 92% maintained or attained narrowly-defined good psychosocial functioning

Adapted from: Zanarini MC, et al. *Acta Psychiatr Scand.* 2010;122:103-109.

Clinical Implications of Psychosocial Findings

- Rehabilitation model might be useful for those who cannot work or go to school full-time in an effective and consistent manner

Adapted from: Zanarini MC, et al. *Acta Psychiatr Scand.* 2010;122:103-109.

Collaborative Longitudinal Personality Disorders Study (CLPS)

- Also NIMH-funded
- Now finished after following subjects for 10 years
- Basically the same symptomatic and psychosocial findings

Adapted from: Gunderson JG, et al. *Arch Gen Psychiatry.* 2011;68:827-837.

Recovery from BPD

- Recovery is defined as having a concurrent remission from BPD and narrowly-defined good psychosocial functioning

Adapted from: Zanarini MC, et al. *Am J Psychiatry.* 2010;167:663-667.

Time-to-Recovery from BPD*

2-Year Follow-Up %	4-Year Follow-Up %	6-Year Follow-Up %	8-Year Follow-Up %	10-Year Follow-Up %
14.3	26.8	36.0	42.8	50.3

*Recovery from BPD defined as concurrent remission from BPD and narrowly-defined good psychosocial functioning.

Adapted from: Zanarini MC, et al. *Am J Psychiatry.* 2010;167:663-667.

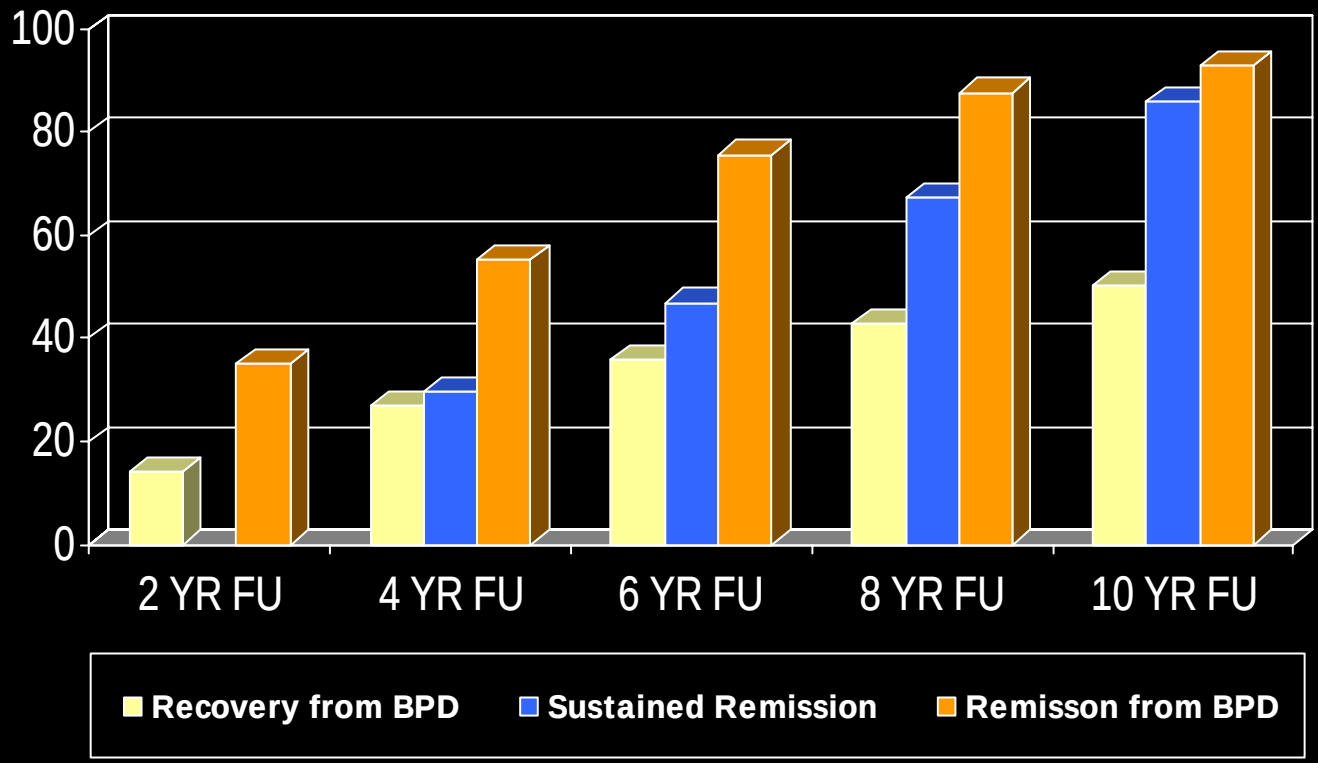
Time-to-Loss of Recovery from BPD*

2 years after 1st remission %	4 years after 1st remission %	6 years after 1st remission %	8 years after 1st remission %
12.6	19.8	28.7	33.6

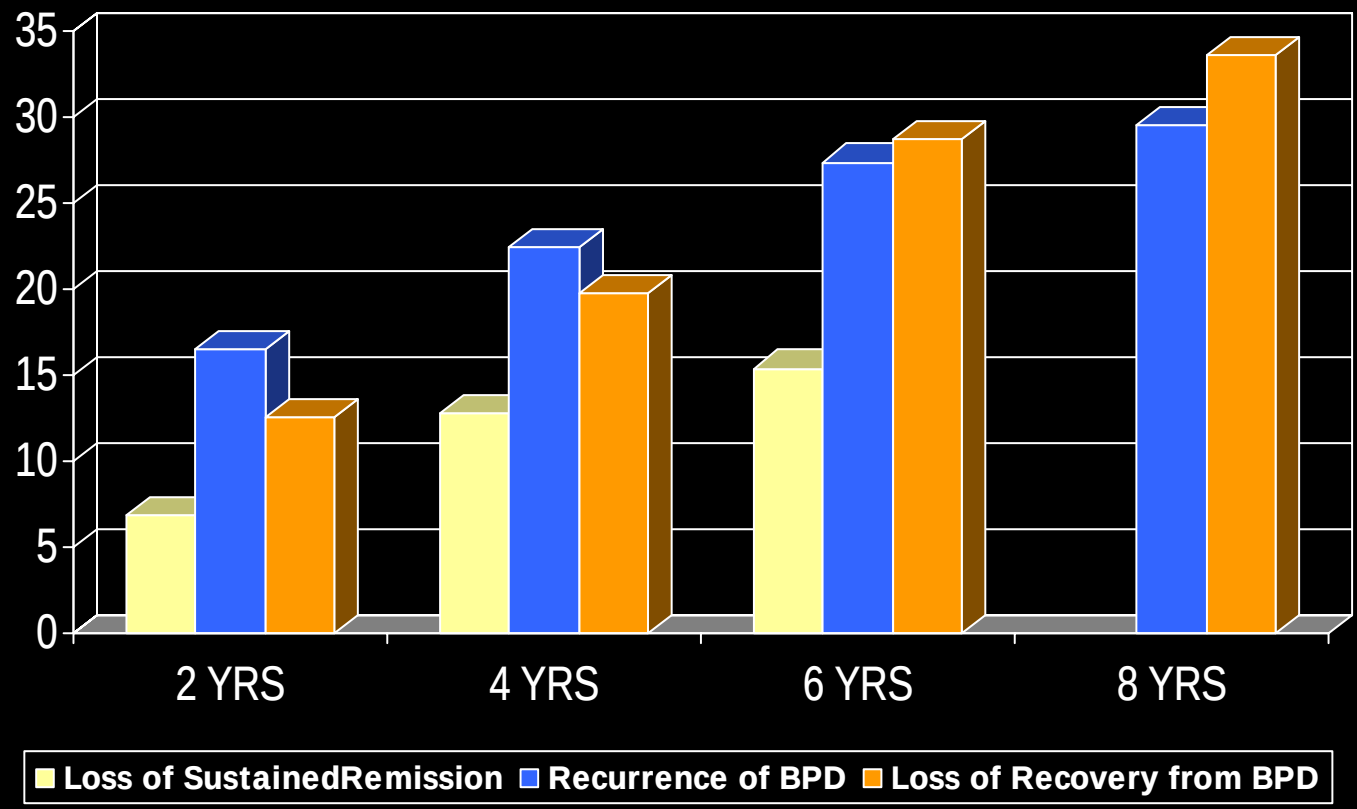
*Loss of recovery from BPD defined as meeting the study criteria for BPD for two years after meeting the criteria for remission in a previous follow-up period and/or loss of one of the four elements of narrowly-defined good psychosocial functioning.

Adapted from: Zanarini MC, et al. *Am J Psychiatry.* 2010;167:663-667.

Time-to Remission, Sustained Remission, and Recovery From BPD



Time-to-Loss of Remission, Sustained Remission, and Recovery from BPD



Predictors of Time to Remission from Borderline Personality Disorder

- 7 factors found to predict earlier time to remission
  - Younger age
  - Good vocational record
  - No history of childhood sexual abuse
  - No family history of substance abuse
  - Absence of an anxious cluster personality disorder
  - High agreeableness
  - Low neuroticism

Adapted from: Zanarini MC, et al. *Am J Psychiatry.* 2006;163:827-832.

Nature of These Predictors

- 4 factors commonly assessed in clinical practice
  - Younger age–demographics
  - Good vocational record–psychosocial functioning
  - No history of childhood sexual abuse–adverse childhood events
  - No family history of substance abuse–family history of psychiatric disorder

Nature of These Predictors (cont.)

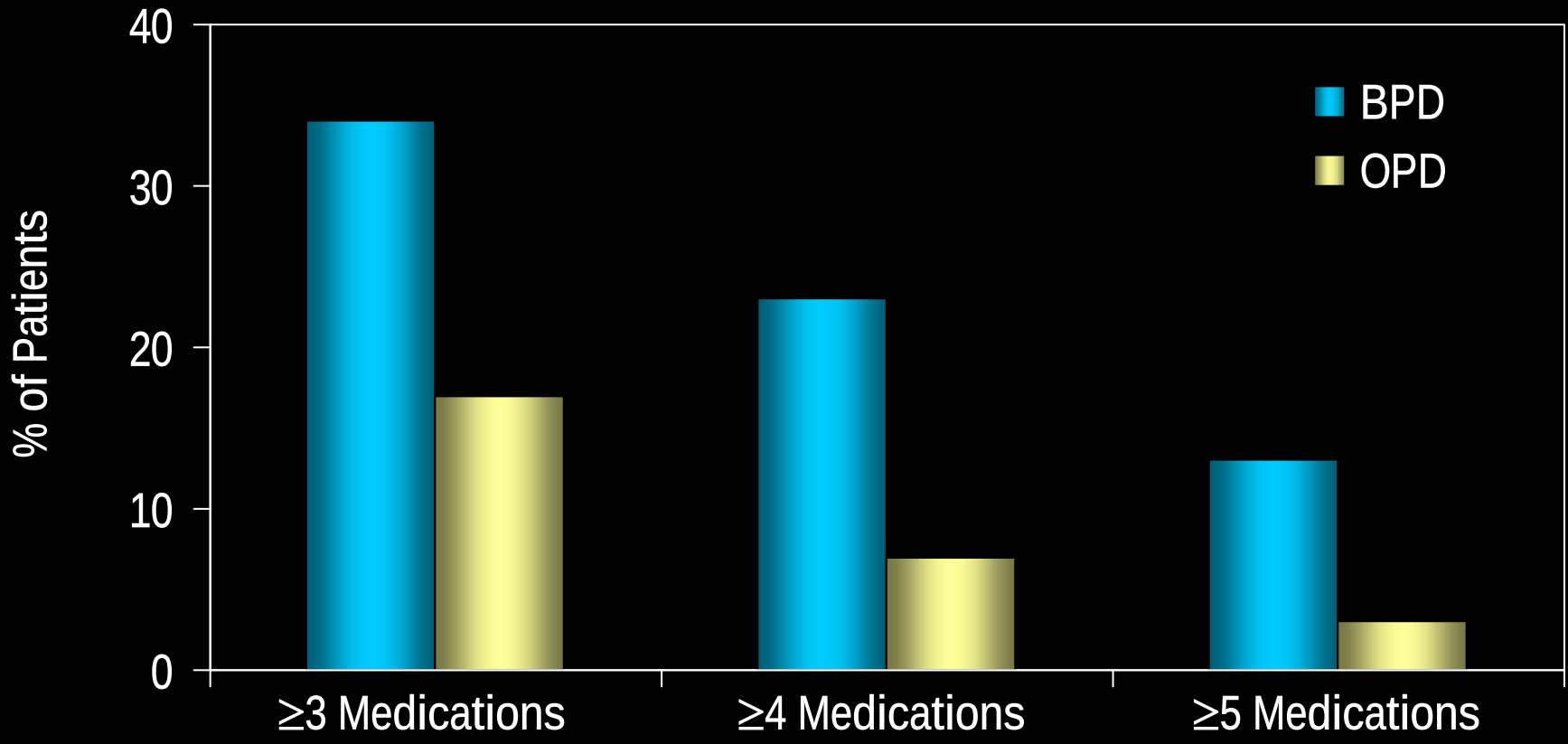
- 3 factors commonly noticed but rarely discussed in clinical practice
- All 3 are aspects of temperament
  - Absence of anxious cluster PD–low levels of shyness and undue dependency
  - High agreeableness–not particularly argumentative or manipulative
  - Low neuroticism–does not typically feel inferior or ashamed

Psychiatric Treatment

- Mostly treated in community
- Over 70% of patients with BPD are in individual therapy and taking standing medications during all 5 follow-up periods
- However, rate of psychiatric hospitalization declined from 79% at baseline to 29% at 10-year follow-up

Adapted from: Hörz, et al. *Psychiatr Serv.* 2010;61:612-616.

Polypharmacy at 10-Year Follow-Up



Adapted from: Hörz, et al. *Psychiatr Serv.* 2010;61:612-616.

Polypharmacy and Borderline Personality Disorder

- No empirical evidence for its efficacy
- Associated with high rates of obesity
- Which, in turn, is associated with elevated rates of
  - Osteoarthritis
  - Diabetes
  - Hypertension
  - Chronic back pain
  - Urinary incontinence
  - Gastroesophageal reflux disorder
  - Gallstones

Adapted from: Frankenburg FR & Zanarini MC. *J Pers Disord.* 2006;20:71-80.

Main Findings

- 93% of patients with BPD experience a remission of their BPD
- Recurrences of BPD are relatively rare
- The course of BPD is very different from that of mood disorders where remission occurs more rapidly but recurrences are more common

Main Findings (cont.)

- Completed suicide is substantially less common than the expected 10%
- This may be due to more trauma-sensitive or supportive treatments

Main Findings (cont.)

- BPD seems to be comprised of two types of symptoms
  - Acute symptoms
  - Temperamental symptoms

Main Findings (cont.)

- Almost 80% of patients with BPD attain broadly-defined good psychosocial functioning
- But only 64% attain narrowly-defined good psychosocial functioning
- Social functioning is less impaired than vocational functioning

Main Findings (cont.)

- Recovery from BPD is more difficult to attain than remission from BPD alone
- However, it is relatively stable once attained

Main Findings (cont.)

- Prediction of time to remission is multifactorial in nature
  - Involves factors that are routinely assessed in treatment
  - And other factors, particularly aspects of temperament, that are not

Conclusions

- Taken together, the results of this study suggest that the prognosis for most, but not all, patients with BPD is better than previously recognized