BIPOLAR AFFECTIVE DISORDER IN CHILDREN AND ADOLESCENTS

Epidemiology, Diagnosis and Treatment

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DEFINITIONS

- BIPOLAR AFFECTIVE DISORDER (BPAD) IS A LIFELONG, DEBILITATING MEDICAL DISORDER WITH MARKED BEHAVIORAL CONSEQUENCES AND A COURSE THAT FLUCTUATES BETWEEN MANIA AND DEPRESSION
THE LAW OF BPAD

- Hellrung’s Law:
  - *If you wait, it will go away*

- Shavelson’s Extension
  - …*having done its damage*

- Grelb’s Addition:
  - *If it was bad, it’ll be back*
BIPOLAR DISORDER

REASONABLE ASSUMPTIONS

- BPAD IS A LIFELONG DISORDER
- CHILDHOOD BPAD IS THE SAME DISORDER AS ADULT BPAD
- THE VALIDITY OF EPIDEMIOLOGY—NUMBERS AND LOGIC
- CORRECT DIAGNOSIS IS BOTH IMPORTANT AND DIFFICULT
THE DIAGNOSIS OF BPAD

“Children are inherently difficult to diagnose. It takes time-consuming evaluation, longitudinal follow-up, considerable expertise, and prudent caution to do an accurate assessment.”

Alan Frances, professor emeritus, Duke University, Chair of the DSM-IV task force
WHY DIAGNOSE AT ALL?

- Onset
- Course
- Etiology
- Severity
- Prognosis
- Treatment options
- Heritability
THE DIAGNOSIS OF BPAD

WHAT is the POINT and THE PURPOSE of the DSM CRITERIA?

- **VALIDITY**—Does it really measure what it is supposed to measure?
- **RELIABILITY**—Will it measure the same over time and with different clinicians?
- **SENSITIVITY**—will it identify most of the cases?
- **SPECIFICITY**—will it identify the right cases?
ESTABLISHING A DIAGNOSIS

HOW IS A VALID DIAGNOSIS MADE?

- EPIDEMIOLOGY
  - Prevalence
  - Gender
  - Age of onset
- FAMILY HISTORY
- SIGNS AND SYMPTOMS
- COURSE AND PROGNOSIS
- TREATMENT RESPONSE
ESTABLISHING A DIAGNOSIS

PREVALENCE OF BIPOLAR DISORDER

- Wide range of estimates
  - Classic manic-depressive figures were established around 1-2%—current range from 1.3%-2.6%
  - Similar but slightly higher frequency than schizophrenia
- The influence of diagnostic criteria changes and definitions
- Possible actual changes in prevalence
ESTABLISHING A DIAGNOSIS

- **GENDER DISTRIBUTION**
  - EQUAL GENDER PREVALENCE ACROSS AGE GROUPS
  - COMPARE TO 2:1 FEMALE / MALE INCIDENCE FOR DEPRESSION
ESTABLISHING A DIAGNOSIS

- AGE OF ONSET FOR CLASSIC MANIC-DEPRESSIVE ILLNESS
  - Late teens early twenties
  - Increased late life incidence of mania
  - British studies—increasing mania with age
ESTABLISHING A DIAGNOSIS

- **AGE OF ONSET IN RECENT STUDIES**
  - Onset depends upon diagnostic criteria
  - 20-40% of adult patients say onset was in childhood
  - 74% of one sample (Fraedda, 2004) of diagnosed BPAD retrospectively showed pathology before age three—insomnia, irritability, rage
  - Pre-pubescent onset—the big question
ESTABLISHING A DIAGNOSIS

FAMILY HISTORY AND INHERITANCE

- BPAD runs in families
- 60% of patients have family history of BPAD
- 10% of the first degree relatives of patients will have BPAD
- Monozygotic twins show concordance rate of 56-80%
ESTABLISHING A DIAGNOSIS (review)

HOW IS A VALID DIAGNOSIS MADE?

- **EPIDEMIOLOGY**
  - Prevalence
  - Gender
  - Age of onset

- **FAMILY HISTORY**

- **SIGNS AND SYMPTOMS** *

- **COURSE AND PROGNOSIS**

- **TREATMENT RESPONSE**
ESTABLISHING A DIAGNOSIS

PRESENTING SYMPTOMS (DSM plus)

CLASSIC PRESENTATION

- Full manic syndrome—mandatory
- Discrete episodes of unmistakable mania and depression
- Chronic and debilitating—severity
- 50% of the individuals who suffer from BPAD experience hallucinations and delusions (Vandeleur CL, Merikangas, 2013)
ESTABLISHING A DIAGNOSIS

COURSE AND PROGNOSIS

- Lifelong duration
- Fluctuating and often deteriorating course
- High completion of suicide 10-15%—50% attempt rate (Fagiolini, Kupfer, 2004)
- Classic manic depressive cycles
  - Cycle recurrence 3 months—9 years
  - Increased cycle frequency with age
- Proposed changes in cyclicity
THE DIAGNOSIS OF BPAD

- WHAT ARE THE ODDS... THAT THE FREQUENCY OF A DIAGNOSIS COULD INCREASE FORTY TIMES IN A DECADE?
THE DIAGNOSIS OF BPAD

**STATISTICALLY IMPOSSIBLE**

- If BPAD is a lifetime disorder, and if the established community prevalence rate is between 1.3% and 1.6% of the population (2.6% cited by Kerner, 2014), then the childhood prevalence cannot be higher than the adult prevalence. Yet between 1994 and 2004 the rate of adult BPAD diagnosis doubled, while the rate of childhood BPAD diagnosis increased by 40 times.
THE DIAGNOSIS OF BPAD

- **CLINICALLY ILLOGICAL**
  
  - Longitudinal studies—the proof in the pudding
  
  - Chronic severe irritability converted over time into BPAD only 1.2% of the time \((\text{Towbin, Axelson, et al, 2013})\)
  
  - Classically defined mania in any form converted to BPAD at 2 years, 4 years and 5 years at the rate of 28%, 38% and 45% respectively \((\text{Towbin, Axelson, et al, 2013})\)
  
  - Chronic irritability is much more common than mania, by universal agreement
THE DIAGNOSIS OF BPAD

GENETICALLY UNLIKELY

BPAD is predominantly a genetic disorder with about 85% heritability (McGuffin, Rijsdijk, et al, 2003; Kerner, 2014 estimates 60-80% heritability). This means that a 40 fold rise in diagnosis would indicate either an extremely rapid mutation rate over a ten year period or intensely devoted exclusive mating between individuals who both had BPAD. It would be the equivalent of a national 40 fold rise in red haired children over a decade.
So what is going on that might possibly account for the increased diagnosis?...
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THE DIAGNOSIS OF MANIA

MANIC EPISODE—DSM IV Criteria

- A) A distinct period of abnormally and persistently elevated, expansive or irritable mood, lasting at least 1 week (or any duration if hospitalization is necessary)

- B) During the period of mood disturbance, three (or more) of the following symptoms have persisted (four if the mood is only irritable) and have been present to a significant degree:
1) Inflated self-esteem or grandiosity
2) Decreased need for sleep (e.g., feels rested after only 3 hours of sleep)
3) More talkative than usual or pressure to keep talking
4) Flight of ideas or subjective experience that thoughts are racing
5) Distractibility (i.e., attention too easily drawn to unimportant or irrelevant external stimuli)
6) Increase in goal-directed activity (at work, at school, or sexually) or psychomotor agitation
7) Excessive involvement in pleasurable activities that have a high potential for painful consequences (e.g., engaging in unrestrained buying sprees, sexual indiscretions, or foolish business investments)
C) The symptoms do not meet criteria for a Mixed Episode

D) The mood disturbance is sufficiently severe to cause marked impairment in occupational functioning or in usual social activities or relationships with others, or to necessitate hospitalization to prevent harm to self or others, or there are psychotic features.

E) The symptoms are not due to the direct physiological effects of a substance (e.g., a drug of abuse, a medication or other treatment) or a general medical condition (e.g., hyperthyroidism)
MANIA IN CHILDREN

- Distinguishing euphoria from childhood elation
- Differentiating play from grandiosity
- Distinguishing manic sleep habits from childhood sleep disturbances and patterns
MANIA IN CHILDREN

THE KEY: SEVERITY AND IMPAIRMENT

- The difference between age normal play and grandiosity
- The difference between childhood happiness and euphoria
- The difference between hypersexuality and sexual abuse preoccupation
THE DIAGNOSIS OF BPAD

Are there sufficient alternative diagnostic explanations for the epidemic of dysregulated youth?
THE DIAGNOSIS OF BPAD

WHAT ARE the CORE FEATURES of NEGLECT AND ABUSE, and HOW do they COMPARE to BPAD?

- Impulsivity
- Dysregulation of Arousal
- Dysregulated Moods—Labile and Changeable
- Dysregulated Behavior—Explosive and Aggressive
- Poor Interpersonal Relations—Impaired Attachments and Empathy
- Impaired Frontal “Executive Functions”—like Insight, Introspection, Prediction, Planning, and Patience
THE DIAGNOSIS OF BPAD

- Euphoria
- Grandiosity
- Impaired reality testing
- Pressured speech
- Flight of ideas
- Distractibility
- Motor hyperactivity
- Decreased need for sleep
The reliable criteria

- Grandiosity
- Hypersexuality
- Euphoria
- 50% of the individuals who suffer from BPAD experience hallucinations and delusions (Vandeleur CL, Merikangas, 2013)
THE DIAGNOSIS OF BPAD

COMMUNITY DIAGNOSES

- NIMH study
- NM Juvenile Justice System figures
- It is possible that the statistically highest diagnostic rates for BPAD are generated by clinicians who may have never seen an actual case of mania or BPAD
THE DIAGNOSIS OF BPAD

DIAGNOSTIC RECOMMENDATIONS:

- Learn and use the full diagnostic protocol
- Know and keep current with epidemiology
- If the patient is on drugs, then it is the drugs
- If the patient has a history of trauma, abuse and neglect, it is the trauma
- Caveat emptor—always seek a practitioner fully trained in child psychiatry, neurodevelopment and developmental trauma
- Get a second opinion
END