#### **Mood Disorders**

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## "Mood Disorders" in *DSM-IV-TR* refer to:

- Depression: feelings of sadness and gloom, inability to concentrate, and a disruption of psychomotor functioning
- **2. Mania**: intense excitation, elation, physical over-activity, and recklessness
- **3. Bipolar disorder**: mixture of the first two 10 distinct *DSM* dx are formed from a mixture of the above

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## "Mood episodes": the building blocks of depressive and bipolar diagnoses

- Major depressive episode (MDE): ≥ 2 weeks during which there is either depressed mood or loss of interest or pleasure + 4 other symptoms
- 2. Manic episode (ME): ≥ 1 week during which there is an abnormally and persistently elevated, expansive, or irritable mood + 3 other symptoms
- Mixed episode (MXE): ≥ 1 week with MDE + MF
- Hypomanic episode (HME): ≥ 4 days like ME, except no psychotic features, no marked impairment

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## 3 DSM-IV "Depressive Disorders"

- Major Depressive Disorder (MDD)
  - ≥ 1 MDE lasting for ≥ 2 weeks
  - For single, no history of other episodes
  - For recurrent, a 2-month interval without MDE is needed between 2 episodes
- · Dysthymic Disorder
  - ≥ 2 years of depressed mood (1 yr for kids) + 2 other symptoms, that don't make it to MDE
- Depressive Disorder NOS

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## 4 DSM-IV "Bipolar Disorders"

- · Bipolar I Disorder
  - ≥ 1 ME or MXE, usually with past MDE
- Bipolar II Disorder
  - $\geq$  1 MDE +  $\geq$  1 HME, never had an ME or MXE
- Cyclothymic Disorder
  - ≥ 2 years of depressive symptoms + hypomanic symptoms (never making it to full MDE or ME) [1 yr for kids]
- Bipolar Disorder NOS

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# 2 DSM-IV Mood "Disorders Based on Etiology"

- Mood Disorder Due to a General Medical Condition
  - E.g., degenerative neurological conditions, cerebrovascular disease, metabolic conditions (i.e. vitamin B12 deficiency), endocrine & viral conditions, some cancers
- Substance-Induced Mood Disorder
  - Medications, ECT, stimulants, steroids, toxins, drugs of abuse
- + Mood Disorder NOS

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#### **Specifiers of Mood Disorder Diagnoses**

- DSM includes *specifiers* to describe additional features:
  - Severity (mild, moderate, severe without psychotic features)
  - Psychotic (severe with psychotic features, mood-congruent psychotic features, mood-incongruent psychotic features)
  - **Remission** (in partial remission, in full remission, unspecified)
  - Chronic
  - With **Catatonic** Features
  - With Melancholic Features
  - With **Atypical** Features
  - With Post-partum Onset
  - Longitudinal Course Specifiers (with and without full inter-episode recovery, With seasonal pattern)

#### Depression

- Discussed since antiquity as melancholia
- Only 40 years ago, seen as fairly rare, serious and usually requiring hospitalization, or as self-limiting (~6-12 weeks)
- Today, depression is seen as one of the most frequent mental health problems with a huge impact on society

## DSM criteria for Major Depressive Disorder

- Depressed mood most of the day
- · Loss of pleasure in most activities
- Significant weight gain or loss
- Increased or decreased appetite
- Insomnia or hypersomnia
- · Psychomotor agitation or retardation
- Feelings of worthlessness, problems concentrating
- · Suicidal ideas, plans, attempts

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# Aggressive treatments for, and marketing of, depression

- SSRI antidepressants were the most frequently prescribed drugs in the U.S. in 2007
  - 233 million prescriptions in 2007
  - Sales of \$13.5 billion in 2006
- However, depression remains "underrecognized" and "undertreated" according to mainstream mental health practice
- Federal task forces in 2002 and 2004 recommended that everyone in the U.S. be screened for depression

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#### Epidemiological surveys of DSM-IV MDD

- About 7% of US adults qualify for MDD dx in a 12-month period
- Half moderate or <, half severe or >
- About 80% of MDD cases are co-morbid, and MDD is infrequently the primary diagnosis
- About 1 in 4 persons may be "misdiagnosed" because they're suffering from normal reactions to everyday losses and blows
  - Bereavement exclusion (Wakefield et al. reading)

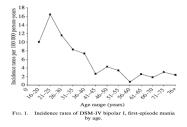
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#### Mania

- Much more rare than depression
- Feelings of elation, exuberance, excitation, beliefs of increased abilities, ideas of grandeur, and often serious errors of judgment and irresponsible conduct
- Also a symptom of organic diseases, such as infections and tumors, as well as effects of certain drugs, like antidepressants
  - Up to 25%-30% of people treated with antidepressants will "switch" to mania
- No well-established psychosocial theory of mania

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## Incidence of mania Southeast London, 1965-1999



Kennedy et al. (2005). Psychological Medicine, 35, 855-863

## Social-community perspective

- Emphasizes objective living conditions that make people feel depressed, and unpleasant or traumatic life events/stressors
- Symptoms of depression and anxiety are called "psychological distress"
- 2003 Kessler et al.: Episode of MDD associated with being 1) a woman, 2) a homemaker, 3) unemployed/disabled, 4) having <12 yrs education, and 5) living at or near poverty

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#### Social-community perspective

- Gender difference in rates of depression explained by particular constraints (psychological, interpersonal, social, economic) imposed on girls and women
- Person's lack of control over his/her life (like "learned helplessness" in psychology) is main explanatory concept
- Intervention options: gender sensitive, feminist, group, self-help, home-based
- Emphasis on community programs and primary prevention through building of social capital

## Early psychodynamic perspective

- Depression is a reaction to loss (whether real or symbolic) of a loved person
- First theorized as feelings of guilt from conflict between a strong superego and weak ego.
   Guilt arises because of anger and hostility retained from real or imagined loss of love objects: when these feelings are repressed, they turn against self

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## Later psychodynamic perspective

- · Guided by attachment theory
- Early trauma and loss disrupt the development of attachment and may create long-lasting tendency to react depressively to current losses, especially in context of negative social conditions

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#### Behavioral perspective

- Depression results from an absence of reinforcing occurrences and/or from punishments
- Environment is filled with negative events or person hasn't learned necessary social skills to fully exploit environment's positive possibilities
- Thus, opportunities for reinforcement become rarer (e.g., most people avoid depressed people)—vicious circle reinforces depression.
- This model dovetails with social-community perspective

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### Cognitive perspective

- Most popular psychological theories about depression; CBT the most studied psychosocial intervention
- A.T. Beck formulated main theory and intervention in early 1960s
- "Depressogenic schemas" (excessively rigid, inappropriately negative attitudes) develop unconsciously from negative early experiences
- These "schemas" are activated by losses and rejections later in life, prompting people to think negative automatic thoughts (NATs)
  - NATs are seen as the immediate cause of depressed states

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## Cognitive-behavioral therapy

Involves helping people to

- 1. Identify and correct "inaccurate" perceptions and thoughts
- Engage more often in enjoyable social activities (to increase opportunities for reinforcement)
- 3. Improve problem-solving and social skills

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"Depression's Upside," New York Times,



- Depression: An adaptive response to affliction.
- Darwin: "well adapted to guard a creature against any great or sudden evil..."
- "Depressed affect makes people think better."

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### Biological school of thought

- Dominated popular and professional discourse for the past 30 years
- Biologically, depression remains "a heterogeneous disorder with a highly variable course, an inconsistent response to treatment, and no established mechanism." (Belmaker & Agam. (2008). New Engl J Med, p. 55)

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### Biological school of thought

- The main biological hypothesis about depression is the monoamine deficiency hypothesis
  - Suggests that abnormally low levels of monoamines (dopamine, norepinephrine, and serotonin) cause depression
  - No study has identified a deficiency or abnormality of monoamines in plasma, urine, or brain fluids, nor in postmortem studies of brains of people with depression
- The theory derives from the mechanism of action of most antidepressants: these increase monoamine levels in the brain
- Commercial marketing of SSRIs has included claims that these drugs "correct" a "chemical imbalance" (<u>Leo & Lacasse reading</u>)

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## Many biological treatments for mood disorders

- Include all drug classes, but mostly antidepressants, lithium, antipsychotics, and anticonvulsants,
- Electroconvulsive (electroshock) therapy (ECT)
- Light
- Vagal nerve stimulation, trans-cranial magnetic stimulation

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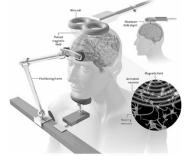
## Vagus nerve stimulation



Approved by the FDA in July 2005 for "the adjunctive long-term treatment of chronic or recurrent depression..." despite the FDA review committee recommending no approval.

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## Trans-cranial magnetic stimulation



Approved by the FDA in 2008 for the treatment of depression.

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## Community-based studies

 The only large population-based study done that compared those on and those not on antidepressants, found that those on antideps had longer episodes and more relapses than those not taking drugs (Patten, 2004)

# Recently publicized risks of antidepressants: suicidality

- In 2005, FDA warned that all antidepressants increase the risk of suicidal ideation in youth (in 1 of 50 treated persons)
- The FDA's analysis of pediatric trials shows that drugs double the risk of suicidal ideation (4% on drugs vs. 2% on placebo)
- However—studies using databanks from managed-care organizations do not typically show an increase in completed suicides during antidepressant treatment

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# How would antidepressants provoke suicidality?

- Akathisia (intense restlessness, agitation)
- Activation (continuum of agitation and obsessiveness leading to outright mania)
- Eventual downregulation (loss of) serotonin

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### **Problems with drug trials**

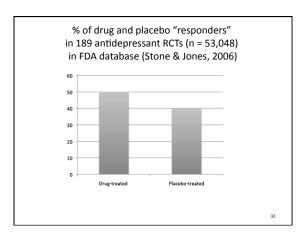
- Patients selected don't resemble ordinary patients
- Trials' lengths don't reflect ordinary treatment lengths
- Outcome measures not clearly related to actual improvement
- Use of inert placebos breaks the blind
- · and many more...

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#### Despite these biases in trials' design

- Review of 47 trials of 6 popular antidepressants (Kirsch et al. (2002) showed that mean difference between drug and placebo groups was 1.8 points on the 50-pt Hamilton Depression Rating Scale
  - -Clinically insignificant difference

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## Publication bias in drug research

- From unpublished (FDA) and published studies on 12 antidepressants, Turner et al. (2008) found that 94% of trials were positive according to published studies, whereas only 51% of trials were positive according to both published and unpublished data
  - Studies with negative results are not published, or published misleadingly

#### **Enter NIMH**

- CATIE (Clinical Antipsychotic Trials of Intervention Effectiveness)
- STAR\*D (Sequenced Treatment Alternatives to Relieve Depression)
- **STEP-BD** (Systematic Treatment Enhancement Program for Bipolar Disorder)
- Cost: > \$ 100 million

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## **STAR\*D** study

- Recruited 4,041 patients from 41 clinics across US—cost \$40 million
- Largest-ever study of the drug-treatment of depression
- Aimed to submit patients through successive tx with different drugs if the first course failed
- Remission defined as the outcome of interest
- Aimed to emulate "real world" treatment conditions

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### 1st treatment phase

- Trivedi et al. (2006) reported on first 2,876 followed for planned 14 weeks, all treated gratis with citalopram (Celexa) (+ other drugs to treat sleep, anxiety, agitation or SSRI side effects)
- 790 (27.5%) experienced remission after treatment lasting average of 83.8 days
- 56% experienced AEs from 50% to 100% of time
- 37% rated AEs as "moderate" to "unable to function"

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#### What's "remission" in STAR\*D?

 A participant reporting "I feel sad more than half of the time" OR "Most of the time, I struggle to focus my attention or to make decisions"

#### AND

- "I rarely eat within a 24-hour period, and only with extreme personal effort or when others persuade me to eat"
- 91% of remitters had >1 symptom (median of 3)

Overview of results from STAR\*D's 4 treatment phases (Rush et al. 2006)

Phase 1: 3,671 entered, 36.8% remitted
Phase 2: 1,439 entered, 30.6% remitted
Phase 3: 390 entered, 13.6% remitted
Phase 4: 123 entered, 14.7% remitted

• Average remission rate per phase: 23.9%

• Cumulative remission rate: 43%

• Relapse rate (after phases 3 & 4): 50%

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#### **STAR\*D: The bottom line**

- Of all patients entering STAR\*D, "the proportion that responded or remitted and stayed well for a year was estimated to be a disappointing 15%."
  - -Nierenberg et al., 2008, p. 433

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#### Even lack of effectiveness sells...



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### STEP-BD study (Perlis et al., 2006)

- Largest-ever study of the treatment of bipolar disorder
- 1,469 people recruited while their disorder was symptomatic
- Treatment was monitored up to 24 months
- "Best-available" treatment protocol, flexible, individually tailored

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### **Treatments evaluated in STEP-BD**

(from the first 500 patients: Ghaemi et al., 2006)

- Anticonvulsants—74%
- Antidepressants—47%
- Lithium—38%
- Antipsychotics—31%
- Benzodiazepines—25%
- Only 11% received a single drug

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#### Results of STEP-BD

• 858 (58.4%) recovered from the study-entry episode, but only 442 of them (30% of the initial sample) had not relapsed by study's end.

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## Recent statements on bipolar disorder in AJP

- It's easy to forget that bipolar disorder, as we know it, is a recent construct..."
- "Every aspect of its definition, boundaries, mechanisms, and treatment, however, is subject to debate. In fact, there is no objective measure that can determine that one has bipolar disorder or does not have it."
- "We are far from a rigorous definition of bipolar disorder."

Swann, A.C. (2006). Am J Psychiatry, 163, 178.

#### Results from an even-more "real-world" study

- Study sponsored by managed-care industry, in Minnesota (Lerner, 2009)
- Surveyed depressed persons 6 months after they began drug treatment in 54 clinics
- Patients rated themselves on 9 DSM symptoms
- Average remission rate: 4% (range: 0%—11%)

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## General conclusions concerning medications used for "mood disorders"

- Most people do not respond so well to drugs
- Usual reasons for giving people drugs must be re-evaluated
  - e.g., "works for most people"; "chemical imbalance"; "drugs target specific abnormalities"; "most effective treatment"; "something must be done," etc.
- More sophisticated models are needed to understand how drugs affect people.

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#### Implications for social work thinking

- Social workers must reach their own critical understanding of the drug literature and not parrot second-hand, erroneous messages from others and from the media.
- Otherwise, the profession keeps itself intellectually under-developed.
- Critical understanding of social work's functions within the biomedical-industrial complex is essential for informed practice and for adapting to future trends in treatment.