

Depression and Stigma: The Impact of the Biological Model of Depression

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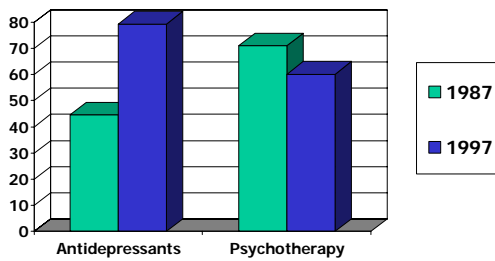
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Facts About Depression

- Women are depressed at twice the rate of men
- Gender difference is found across many countries and cultures
- Gender difference emerges in adolescence
 - Childhood – Boys and girls similar rates
 - Adolescence – Rates for women go up
 - Later adulthood – Rates even out

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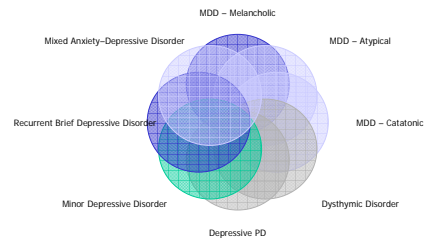
Outpatient Treatment Trends 1987-1997



Olfson, M., Marcus, S. C., Druss, B., Elinson, L., Tanielian, T., Pincus, H. A. (2002). National trends in the outpatient treatment of depression. *Journal of the American Medical Association*, 287, 2, 203-209.

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Understanding Depression



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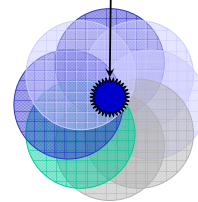
Facts About Depression

- WHO (1996): “Most burdensome disease in the world”
- Up to 25 million affected; 25% of women, 12% of men
- Suicide is ultimate cost

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Understanding Depression

Core experience: Feeling sad, down, blue



Great variability in time course, severity, correlated conditions.

How Do You Explain Depression?

"Scientific research has firmly established that major depression is a biological, medical illness.

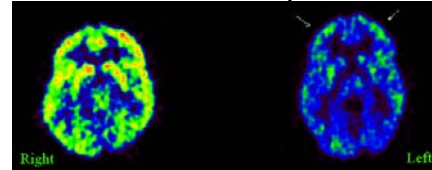
Scientists believe that if there is a chemical imbalance in neurotransmitters, then clinical states of depression result.

Research has shown that imbalances in neurotransmitters like serotonin, dopamine, and norepinephrine can be corrected with antidepressants."



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Serotonin and Depression



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Serotonin and Depression



The "serotonin deficiency" theory of depression

Source: Eli Lilly/Prozac website

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Serotonin and Depression

"We have hunted for big simple neurochemical explanations for psychiatric disorders and have not found them."

Kenneth Kendler, 2005

Note: Kendler is coeditor-in-chief of *Psychological Medicine*.

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Serotonin and Depression

- Serotonin deficiency or other neurotransmitter imbalance?
- Are neurochemical changes associated with depression?
- Of course
- Are neurochemical changes the CAUSE of depression?

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Serotonin and Depression

"The evidence is clear that none of the proposed [neurochemical] theories of depression can possibly be correct... There are few rewards waiting for the person who claims that we really do not know what causes depression or why an antidepressant sometimes helps to relieve this condition."

-- Elliot Valenstein, Professor Emeritus of Psychology and Neuroscience at the University of Michigan

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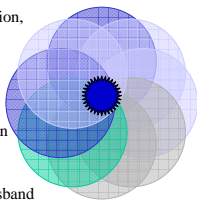
Serotonin and Depression

“The incongruence between the scientific literature and the claims made in FDA-regulated SSRI advertisements is remarkable, and possibly unparalleled.”

Lacasse & Leo, 2005
PLoS Medicine

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Environmental Factors

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- Puberty:
 - Early physical maturation
 - Body dissatisfaction, eating disorders
 - Gender role socialization
 - Marriage:
 - Risk for women
 - Protective for men
 - Postpartum
 - Single
 - Unsupportive husband
 - Multiple children
 - Negative life events
 - Abuse and trauma
 - Physical/medical conditions
 - Disruptive positive events
 - Daily stress/hassles
 - Harassment and discrimination
 - Anxiety
 - Low SES
 - Divorce
 - Unemployment
 - Homelessness

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Modern Biological Models

- Other neurotransmitters
- Hypothalamus-Pituitary-Adrenal Axis (Stress-response system)
- Prefrontal cortex – left deactivation, right activation
- Multiple brain areas, multiple systems, multiple genes

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Understanding Depression

- Depression is complicated
- Serotonin deficiency?
- Biological and environmental factors both may be important
- Environmental factors more important than biological factors *FOR MOST PEOPLE*.
- Must pay attention to the individual – her/his genetics, experiences, context.

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Heritability of Depression

The best estimates of the heritability of depression suggest:

40% = Genetics
60% = Environment

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Effects of Biological Model

- Participants given vignette about Anne who is hospitalized for depression. She meets with an expert in genetics said that Anne's problem...
- "...was due to genetic or hereditary factors."
- "...was not due to genetic or hereditary factors."
- "...was partly due to genetic or hereditary factors."
- What kind of treatment do you recommend?
 - Prescription medicine
 - Psychiatric hospitalization
 - Psychiatrist
 - Therapist or counselor
 - General medical practitioner

(Phelan, Yang, & Cruz, 2006)

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Effects of Biological Model

- Being told depression is genetic doubled the odds that participants would recommend prescription medication and inpatient hospitalization as the only treatment options.

(Phelan, Yang, & Cruz, 2006)

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Treatment of Depression

Silverman: Whatever chemical imbalance I have, Zoloft fit perfectly because I take a half-pill every night before I go to bed. I don't feel like I don't have highs or lows, but what's missing is that complete downward spiral into despair about nothing.

Slate: You're never tempted to go off it?

Silverman: I'm very good. I go to this psychiatrist every six months, like you're supposed to, to make sure you're on the right track. I've mentioned to him, like "I feel great, I feel so stable. After all these years, I wonder what it would be like to be free of it, this medicine." And he's like, "Why? If someone has diabetes, they don't say, 'OK, let's see what it's like to not take insulin.'"



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- *"If genetic explanations become more prominent, help seeking may shift from psychotherapeutic interventions toward more extreme or biomedical interventions, such as psychiatric hospitalization and medication."*

(Phelan, Yang, & Cruz-Rojas, 2006)

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Must Sarah Silverman be on Zoloft the rest of her life?

Are there other options?



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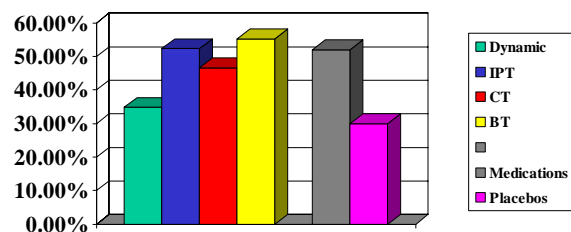
- "The pharmaceutical industry also engaged in a concerted effort to promote the increased sale of these new antidepressant medications through vigorous advertising campaigns directed at physicians, other health care professionals, and more recently the general public. In addition, medications to treat depression have been a featured topic of lead articles in national news magazines, best-selling books, and widely watched television talk shows."

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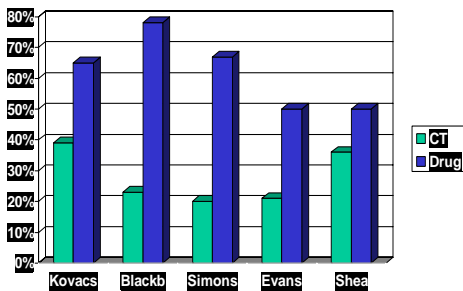
Psychotherapy vs. Medications

(Agency for HealthCare Research and Quality)



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Relapse Following Treatment Termination: CT versus Medications



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Treatment Preferences

- More women (70%) prefer psychotherapy than men (64%)
- African Americans compared to Caucasians:
 - Prefer psychotherapy over medication:
 - African American: 80%
 - Caucasians: 67%
 - Find anti-depressants less acceptable
 - Prescribed more and higher doses of anti-depressants
- Match between preferred and received treatment predicts depression treatment compliance and outcome
- Patients who strongly prefer psychotherapy and do not receive it are likely to go without treatment altogether

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Psychotherapy vs. Medications

- Appear to be equivalent
 - But that does not mean it does not matter what you get
- Medications are easy and work faster
- Psychotherapy is cheaper and more enduring
- Easier to get right meds than right psychotherapy

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Effects of Biological Model

- Increased use of anti-depressants
- Decreased use of psychotherapy
- Decreases blame and anger
- Increases perceptions of dangerousness and unpredictability
- Decreases proactive help seeking
- Decreases talking about it to others
 - E.g., Increases stigma, except for righteous anger
- Provokes harsher behavior

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Perceived Causes of Depression

- Individuals with depression (Brown et al., 2001):
 - Stress (68%)
 - Heredity (41%)
 - Marriage and relationships problems (39%)
 - Not taking care of health (39%)
 - Interpersonal difficulties (34%)
 - Medical Illness (32%)
- Lay people (Kuyken, Brewin, Power, & Furnham, 1992):
 - Unfilled desires, hopes, and ambitions (61%)
 - Responses to a major loss (57%)
 - Biology (14%)
- More likely to improve if you get a treatment that matches your view of depression (Addis & Jacobson, 1996):

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Mehta & Farina (1997)

- Does knowing something about someone else help performance on a task?
- You and another participant are randomly paired together and randomly assigned to exchange information about each other.

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Mehta & Farina (1997)

- **Disease condition:** "You asked me to be candid so here goes...I've been put in a psychiatric hospital a couple of times...My psychiatrist said that I had a disease just like any other, which affected my biochemistry or metabolism..."
- **Psychosocial condition:** "You asked me to be candid so here goes...I've been put in a psychiatric hospital a couple of times...My psychiatrist said that it was because of the way I was raised and the kinds of things that happened to me when I was a kid..."
- **Control condition:** "I think that my life is quite ordinary..."

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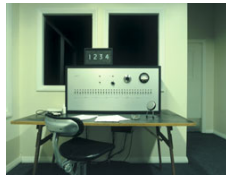
Mehta & Farina (1997)

- If we view those with psychological disorders as sick, they are more likely to be treated like a child, in a harsh manner.
- Viewing psychological disorders as a disease sets those individuals apart. "After all, he is not like me."
- A disease can strike suddenly and unexpectedly. Thus the afflicted may become the target for negative feelings in so far as they serve as a reminder of our vulnerability.

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Mehta & Farina (1997)

- Now you and your partner are randomly assigned to be either a teacher or a learner.
- You get to be the teacher.
- When the learner makes a mistake, you shock the learner.
- You control its intensity and duration.



What do you do?

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Effects of Biological Model

- Positive: Onset of depression (causes)
- Negative: Offset of depression (treatment)



Blame and anger



Dangerous and unpredictable



Provokes harsher behavior



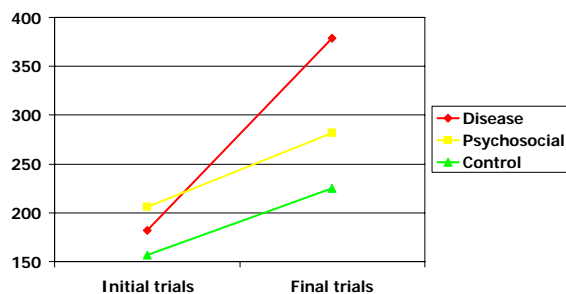
Inpatient or prescription medications



Psychiatrist or therapist

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Mehta & Farina (1997)



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If employing the biological model is bad, what should I say?

- The mainstream alternative to the biological model is that depression is a character flaw, a weakness.
- Most studies have provided some version of a "psychosocial" or "contextual" model of depression.
- Effectiveness in reducing stigma is unclear.
- But it has no negative effect.

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Summary

- Depression is complicated – both biological and environmental factors are relevant
- A biological model of depression dominates the media and advocacy organizations
- The biological model leads to increase in antidepressants and decrease in psychotherapy

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Summary

- Most people believe that depression is more environmental and most prefer psychotherapy
- Both meds and psychotherapy are effective and psychotherapy has long term benefits
- The biological model reduces blame and anger but leads to several negative effects

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Questions

- How do you talk to your clients about depression?
- What about mental health parity efforts?
- What about combined psychotherapy and medications?

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