

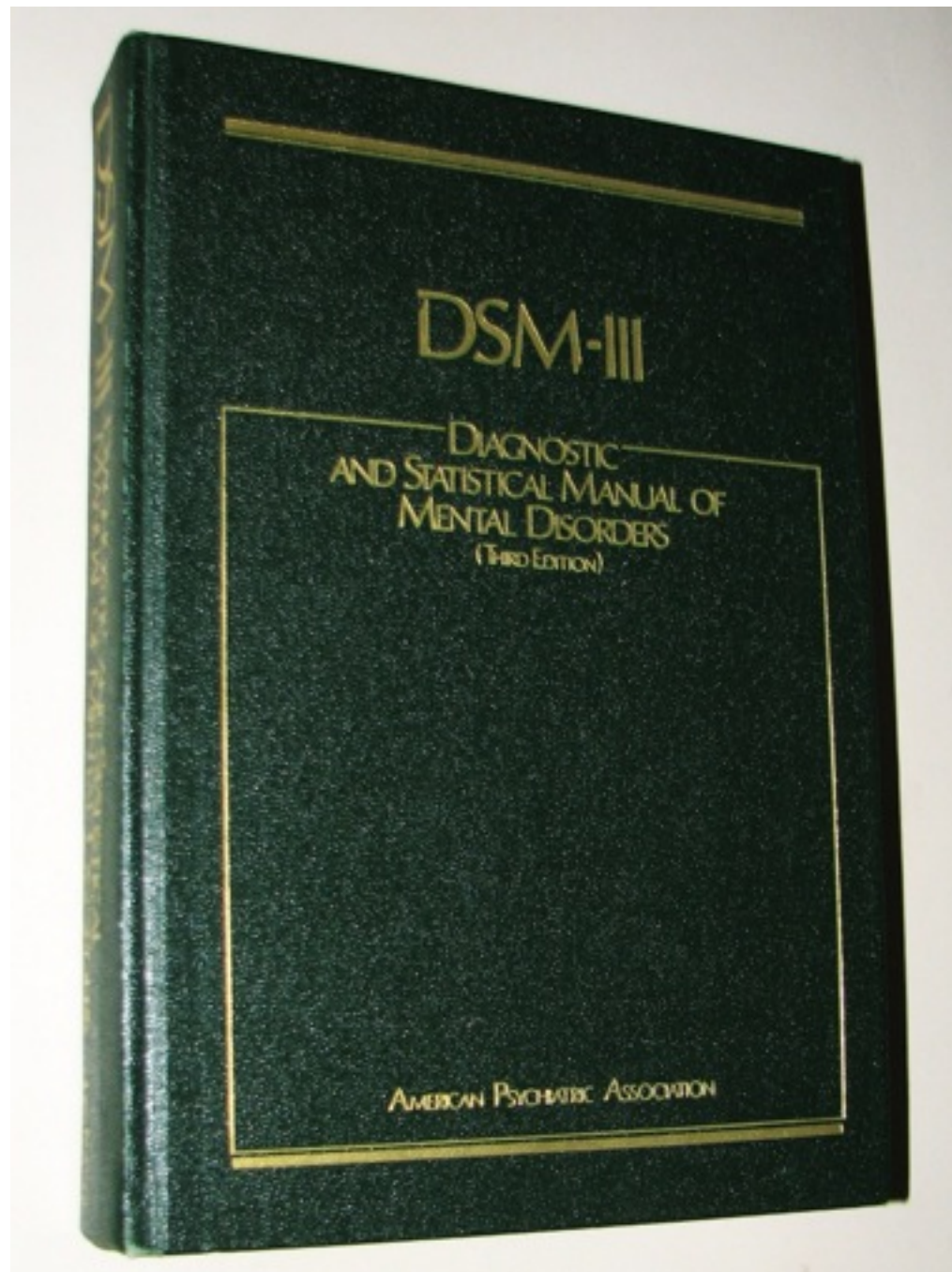
ROBERT WHITAKER AND LISA COSGROVE

PSYCHIATRY UNDER THE INFLUENCE

INSTITUTIONAL CORRUPTION, SOCIAL
INJURY, AND PRESCRIPTIONS FOR REFORM



Robert Whitaker
April 2016



DSM III was the “book that changed everything.”

—Jeffrey Lieberman
American Psychiatric Association President

The Origins of DSM III

The Scientific Impulse

- Psychiatric diagnoses were known to be unreliable.
- The initial proposal, by researchers at Washington University in St. Louis, was to group people by symptoms for research purposes.
- There was an acknowledgement that psychiatry lacked “validated” diagnoses, and redoing the DSM was supposed to help spur research that would provide such validation.
- The initial thought was that there would be fewer than 20 proposed diagnoses.

The Guild Impulse In the 1970s

- The lack of reliability in diagnosis was proving embarrassing for American psychiatry, with many—in the public, in academia, and in government—questioning its legitimacy.
- Thomas Szasz, in his popular book *The Myth of Mental Illness*, dismissed the ideas of psychiatric disorders as “scientifically worthless and socially harmful.”
- Ex-patients were organizing into “liberation” groups, arguing that psychiatry was an agency of “social control” and not a true medical discipline.
- Psychiatry, in its use of talk therapy, was in competition for patients with psychologists, social workers, and other therapists, and it couldn’t prove that its talking therapy was any more effective than the other. But it was more expensive.
- The American Psychiatric Association (APA) declared that it was in a “crisis” and that it faced “extinction” if it did not repair its image with the public.

The Proposed Solution

Adopt a medical model

- This would present psychiatry, to the public, as a medical specialty that treated diseases of the brain.
- This would present psychiatrists as medical doctors, who wore white coats, like their brethren in infectious medicine.

“There is a boundary between the normal and the sick. It is the task of scientific psychiatry, as a medical specialty, to investigate the causes, diagnosis and treatment of these mental illnesses.”

—Gerald Klerman, Former director of the NIMH, 1978

The Product: DSM III(1980)

Number of Disorders: 265.

Conception: Mental disorders are diseases of the brain.

“The major psychiatric illnesses are diseases. They should be considered medical illnesses, just as diabetes, heart disease, and cancer are.” The thought was that each “different illness has a different specific cause . . . There are many hints that mental illness is due to chemical imbalances in the brain and that treatment involves correcting these chemical imbalances.”

Nancy Andreasen

Editor-in-Chief of the *American Journal of Psychiatry*

The Broken Brain, 1984

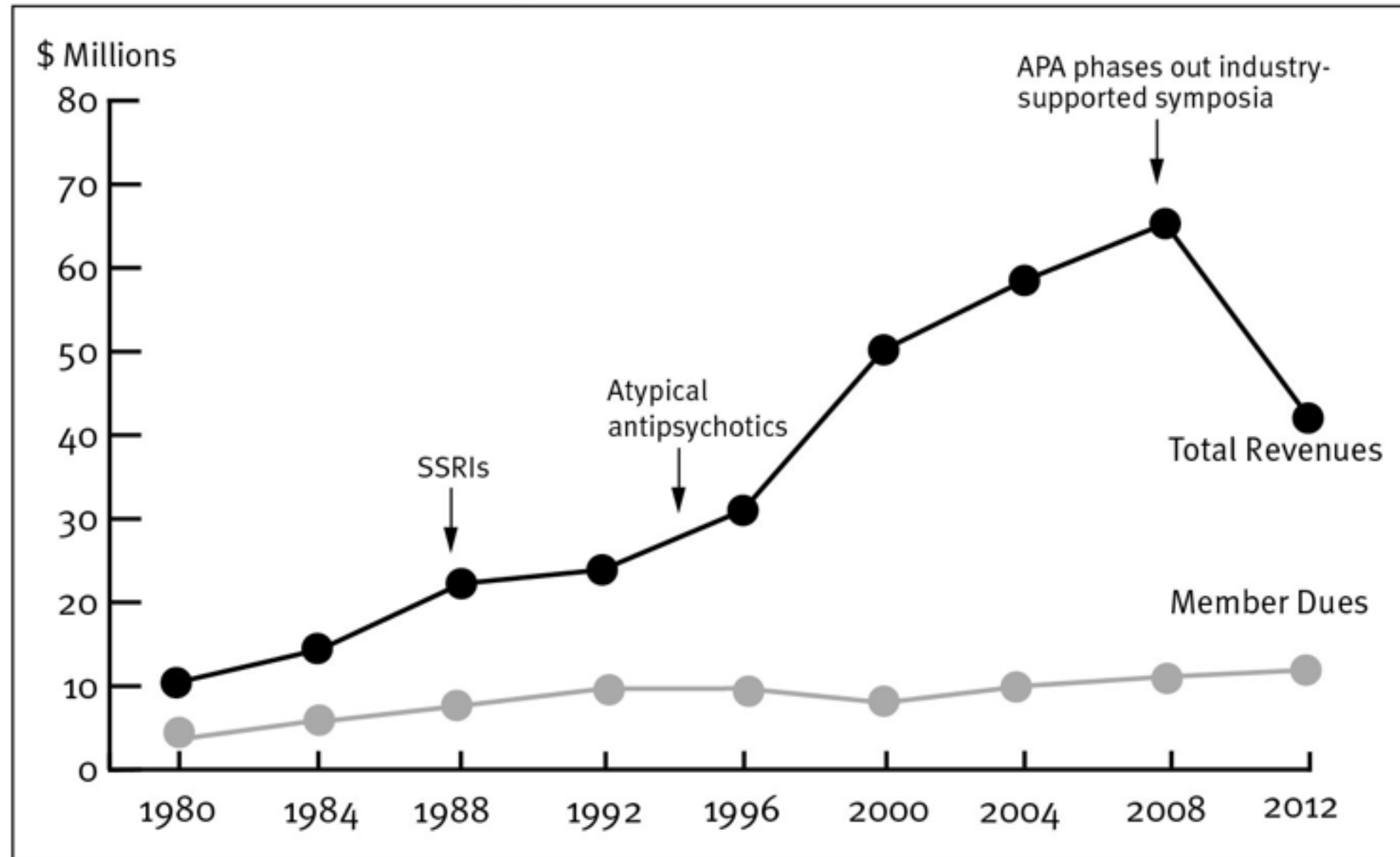
“The pharmaceuticals were delighted.”

—Robert Spitzer

Head of the DSM III Task Force

Pharma Money Now Flows to the APA

APA's Annual Revenues, 1980–2012



Source: APA's annual financial reports, 1980–2012.

Examples of Funding by Pharmaceutical Companies To APA

- “Scientific” symposiums at APA’s annual meeting
- Travel grants to psychiatrists from Europe, Asia and South America to attend APA’s annual meetings. This is how the new model is exported to other countries.
- Media training program for psychiatrists.
- APA’s PR campaigns in United States, which had this message: Disorders are underrecognized, undertreated, and medications are highly effective.
- These campaigns have continued without stop since the early 1980s.

Pharma Money Now Flows to Academic Psychiatrists

Examples of Pharmaceutical Payments to Thought Leaders in Psychiatry

Academic Psychiatrist	Affiliation	Pharmaceutical Company	Amount
Joseph Biederman	Professor at Harvard Medical School	Janssen	\$1.6 million (2000–2007)
Frederick Goodwin	Former NIMH Director	GlaxoSmithKline	\$1.2 million (2000–2008)
Melissa DelBello	Associate Professor at Univ. of Cincinnati	Astra Zeneca	\$418,000 (2003–2007)
Karen Wagner	Director of Child Psychiatry at Univ. of Texas	GlaxoSmithKline	\$160,000 (2000–2005)

Source: Senator Charles Grassley, “Disclosure of Drug Company Payments to Doctors,” 2008.

What Thought Leaders Do

- Serve on task forces that establish diagnostic boundaries
- Conduct clinical trials of new drugs in trials funded by drug companies
- Author articles on those reports (often ghostwritten)
- Speak about the validity of the disorders and efficacy of treatments at scientific symposiums, CME courses, and other professional forums.
- Set clinical practice guidelines
- Write psychiatric textbooks
- Are quoted by the media as the “experts” in this field

At 2008 Annual Meeting of APA, 373 speakers told of having a collective total of 888 consulting agreements with pharmaceutical companies, and 483 to serve on “speaker’s bureaus” at pharmaceutical firms.

“Our field as a whole is progressively being purchased lock, stock, and barrel by the drug companies: this includes the diagnoses, the treatment guidelines, and the national meetings.”

—Psychiatrist Daniel Carlat, 2007

How Did This Affect the Narrative of “Science” That Governs Psychiatric Care?

- Are mental disorders due to chemical imbalances?
- How did it affect the setting of diagnostic boundaries?
- How did it affect reporting of results from trials of psychiatric drugs?

What the American Public was Told About Low Serotonin and Depression

1981: “Researchers believe clinical depression is caused by a chemical imbalance in the brain.” University of Chicago psychiatrist Herbert Meltzer, in interview with Associated Press.

1988. Antidepressants “restore the chemical imbalance scientists have linked to many depressions.” John Talbott, former president of the American Psychiatric Association (APA), in interview with the *St. Petersburg Times*.

2001: “We now know that mental illnesses--such as depression or schizophrenia--are not ‘moral weaknesses’ or ‘imagined’ but real diseases caused by abnormalities of brain structure and imbalances of chemicals in the brain.” -- APA President Richard Harding, in article in *Family Circle* magazine.

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2001: Antidepressants “restore brain chemistry to normal.” Future APA President Nada Stotland, in Family Circle magazine.

2005: A psychiatrist is a “specialist specifically trained to diagnose and treat chemical imbalances.”--APA press release.

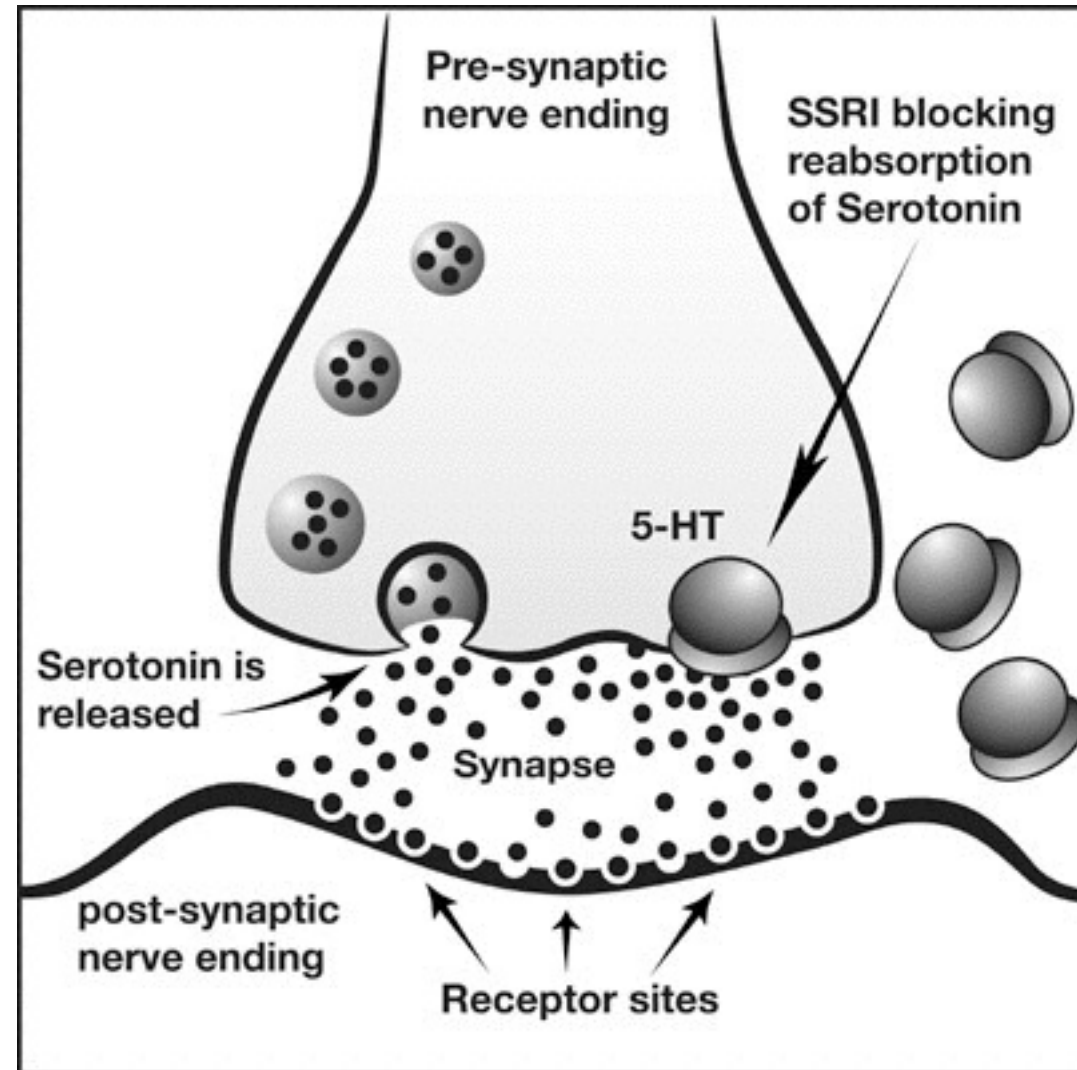
2005: “Antidepressants may be prescribed to correct imbalances in the levels of chemicals in the brain.” APA’s “Let’s Talk Facts About Depression” brochure.

2014: “Research has shown that imbalance in neurotransmitters like serotonin, dopamine and norepinephrine can be corrected with antidepressants.” --National Alliance on Mental Illness.

The Scientific Origins of the Theory

The chemical imbalance theory of depression arose in 1965, after researchers discovered that monoamine oxidase inhibitors and tricyclic antidepressants both blocked the normal removal of norepinephrine and serotonin from the synaptic cleft between neurons. This theoretically increased serotonergic levels in the synaptic cleft, and thus researchers hypothesized that perhaps one or more of these neurotransmitters was abnormally low in depressed patients.

Focus on Serotonin as the Key Neurotransmitter in the SSRI Era



But Do People with Depression Have Low Serotonin?

“Elevations or decrements in the functioning of serotonergic systems per se are not likely to be associated with depression.”

--NIMH, 1984.

The Low Serotonin Theory of Depression Collapses

APA's Textbook of Psychiatry, 1999

“The monoamine hypothesis, which was first proposed in 1965, holds that monoamines such as norepinephrine and 5-HT (serotonin) are deficient in depression and that the action of antidepressants depends on increasing the synaptic availability of these monoamines. The monoamine hypothesis was based on observations that antidepressants block reuptake inhibition on norepinephrine, 5-HT, and/or dopamine. However, inferring neurotransmitter pathophysiology from an observed action of a class of medications on neurotransmitter availability is similar to concluding that because aspirin causes gastrointestinal bleeding, headaches are caused by too much blood loss and the therapeutic action of aspirin in headaches involves blood loss. Additional experience has not confirmed the monoamine depletion hypothesis.”

“I don’t think there’s any convincing body of data that anybody has ever found that depression is associated, to a significant extent, with loss of serotonin.”

--Alan Frazer, University of Texas Health Science Center, 2012

Dopamine Theory of Schizophrenia

“There is no compelling evidence that a lesion in the dopamine system is a primary cause of schizophrenia.” Stephen Hyman, *Molecular Psychiatry*, 2002

Chemical Imbalance Theory of Mental Disorders (in general)

“We have hunted for big simple neurochemical explanations for psychiatric disorders and have not found them.” Kenneth Kendler, *Psychological Medicine*, 2005.

Rest in Peace: The Chemical Imbalance Theory of Mental Disorders

“In truth, the chemical imbalance notion was always a kind of urban legend, never a theory seriously propounded by well-informed psychiatrists.”

--Ronald Pies, July 11, 2011 in *Psychiatric Times*

And Yet the Public Believes

In a 2006 survey:

- 87 percent of Americans said they now knew that schizophrenia was caused by a chemical imbalance.
- 80 percent of Americans said they now knew that depression was caused by a chemical imbalance.

Question Two:

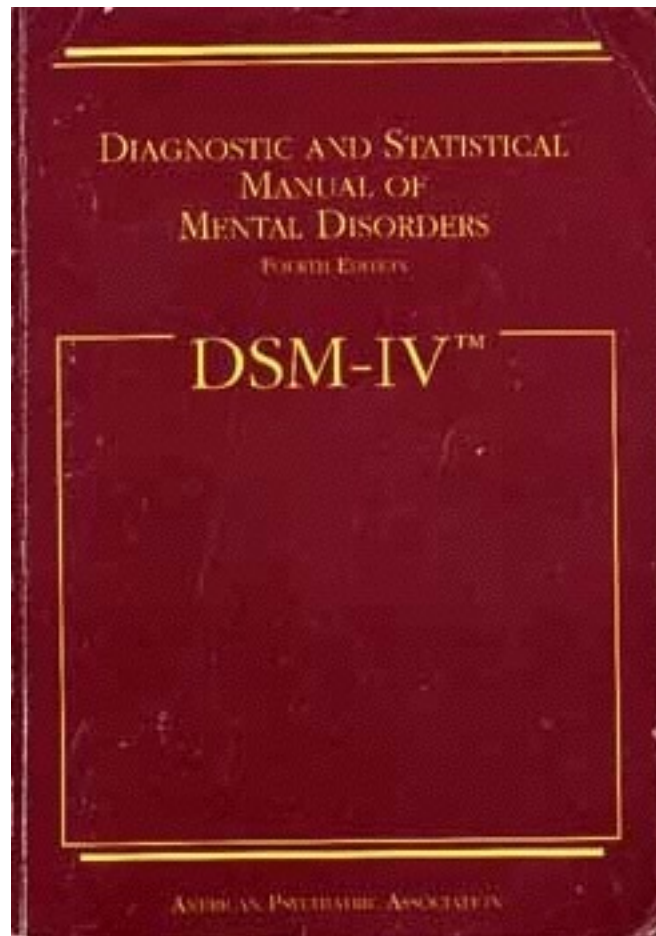
Do the financial influences affect the setting of diagnostic boundaries?

Financial Conflicts of Interest in DSM-IV and DSM-5 Members

	On DSM IV	On DSM 5
Task Force	57%	69%
<i>Work Panels</i>		
Anxiety	81%	57%
Eating disorders	83%	50%
Mood disorders	100%	67%
Sleep disorders	50%	100%
Schizophrenia/psychotic disorders	100%	83%

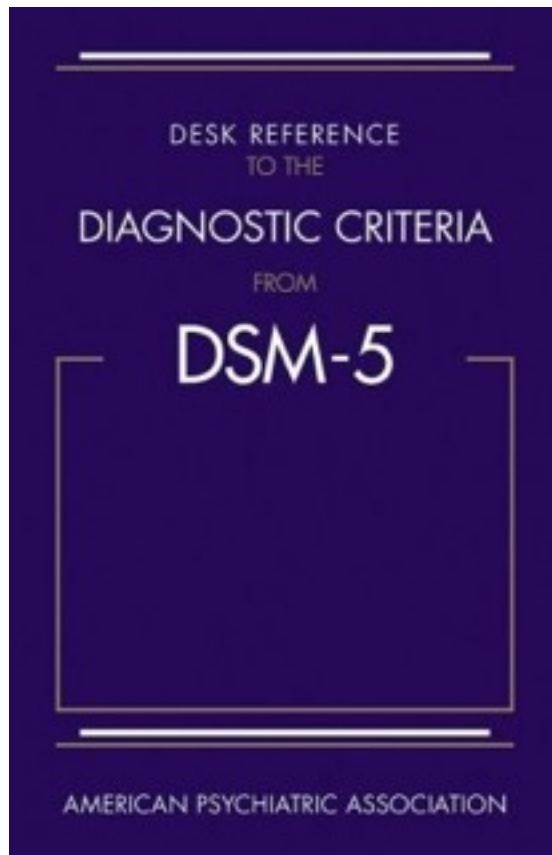
Source: L. Cosgrove. "A comparison of DSM-IV and DSM-5 panel members' financial associations with industry." *PLoS Med* 9 (2012):e1001190.

The DSM IV World (1994)



- DSM IV lists 297 disorders, up from 265 in DSM III.
- Diagnostic criteria for many disorders are loosened (ADHD, mood disorders, etc.)
- Based on DSM IV definitions of mental disorders, researchers determined that 26% of American adults suffered from a diagnosable mental disorder each year, and that 13% of youth experienced a bout of mental illness each year.

The DSM 5 World (2013)



New disorders

- Premenstrual dysphoric disorder
- Binge eating disorder
- Disruptive mood dysregulation disorder for children six years and older
- Hoarding disorder
- Mild neurocognitive disorder for adults

Expanded criteria for making a diagnosis of depression:

The bereavement exclusion for making a diagnosis of major depression is eliminated. A person who has suffered the loss of a loved one can now be diagnosed after two weeks if they meet the criteria for depression. DSM-IV stated that the diagnosis should not be made unless the depression extended beyond two months.

Creating the Anxiety Market for SSRIs

From DSM IV to the Market: The Selling of Paxil

Investigator	On DSM IV Work Group	At SmithKline Advisory Board Meeting in 1993	Authored Article on Efficacy or Safety of Paxil	Consultant, Advisor or Speaker to GlaxoSmithKline
James Ballenger	Anxiety	Yes	For panic disorder/GAD	Yes
David Dunner	Mood Disorders	Yes	For depression	Yes
Robert Hirschfeld	Personality disorders	Yes		Yes
Michael Liebowitz	Anxiety	Yes	For social anxiety disorder	Yes
Jonathan Davidson	Anxiety		PTSD/GAD	Yes

The ADHD Story: A Case Study of Building a Market for Drugs

- Attention deficit disorder was identified as a discrete disorder in 1980. The cardinal symptoms were said to be inattention, impulsivity, and hyperactivity. The disorder was said occur in “as many as 3 percent of prepubertal children.”
- DSM-IV, published in 1994, stated that the disorder consisted of three subtypes (inattentive only, hyperactive-impulsive only, and those who had both types of symptoms.) The disorder was now said to affect “3 to 5%” of all American children.

- Joseph Biederman, who had been a member of the DSM IV work panel for pediatric disorders, now began publishing articles that stated 6 to 9 percent of American schoolchildren had ADHD.
- DSM 5 further loosens the boundaries for diagnosing ADHD.
- Latest survey shows that 13 percent of U.S. youth of school age have been diagnosed with ADHD.

The Payoff to Biederman

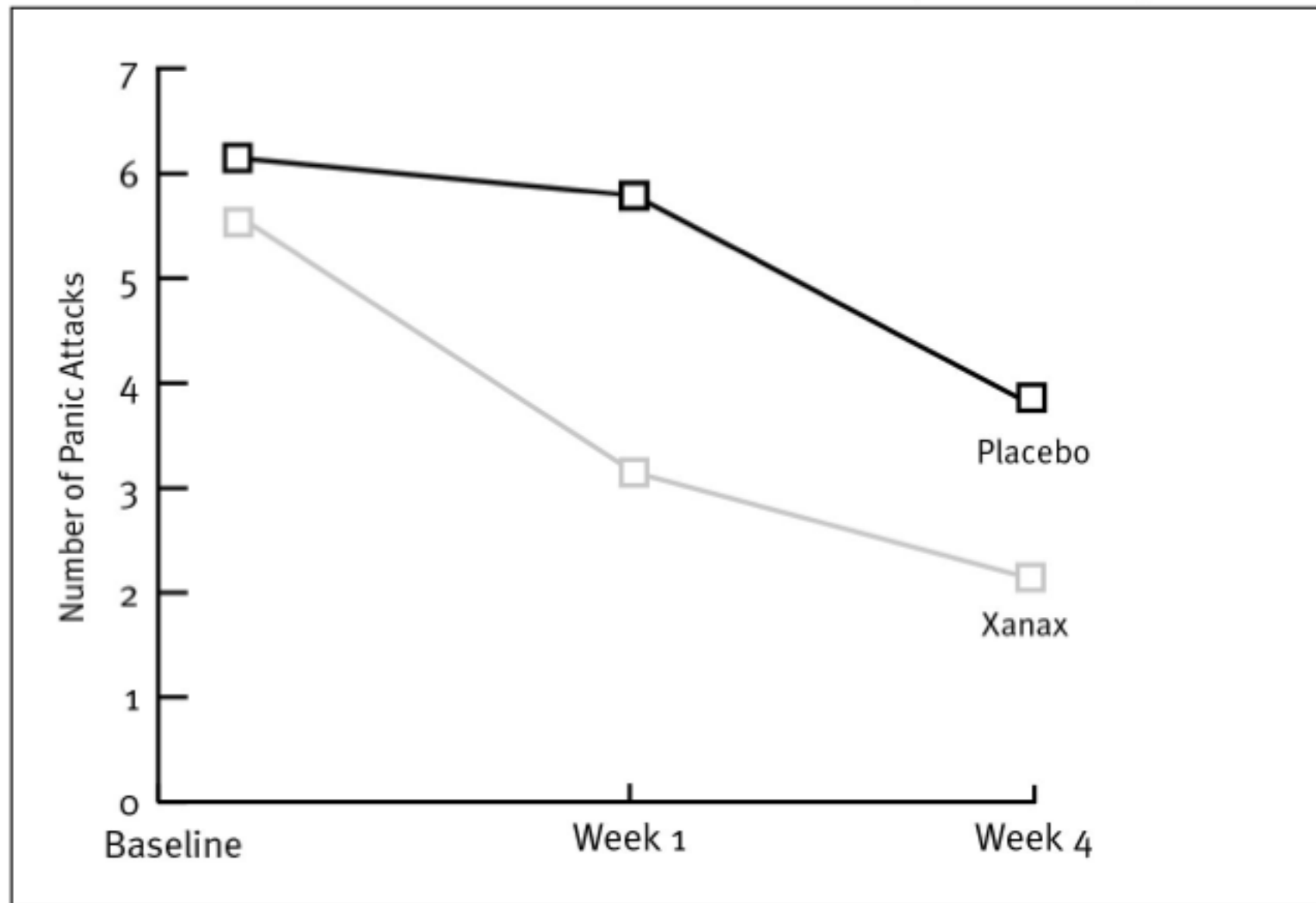
From 1996 to 2011, Biederman received speaker's fees, consulting fees and research funding from more than 24 pharmaceutical companies, including Shire, Janssen, and Eli Lilly, which respectively sold Adderall, Concerta, and Strattera, three popular ADHD drugs. Just one of these companies, Janssen, paid him \$1.6 million during this time.

Question Three:

Did the financial influences affect the reporting of results of trials of psychiatric drugs?

The Testing of Xanax for Panic Disorder (1980s)

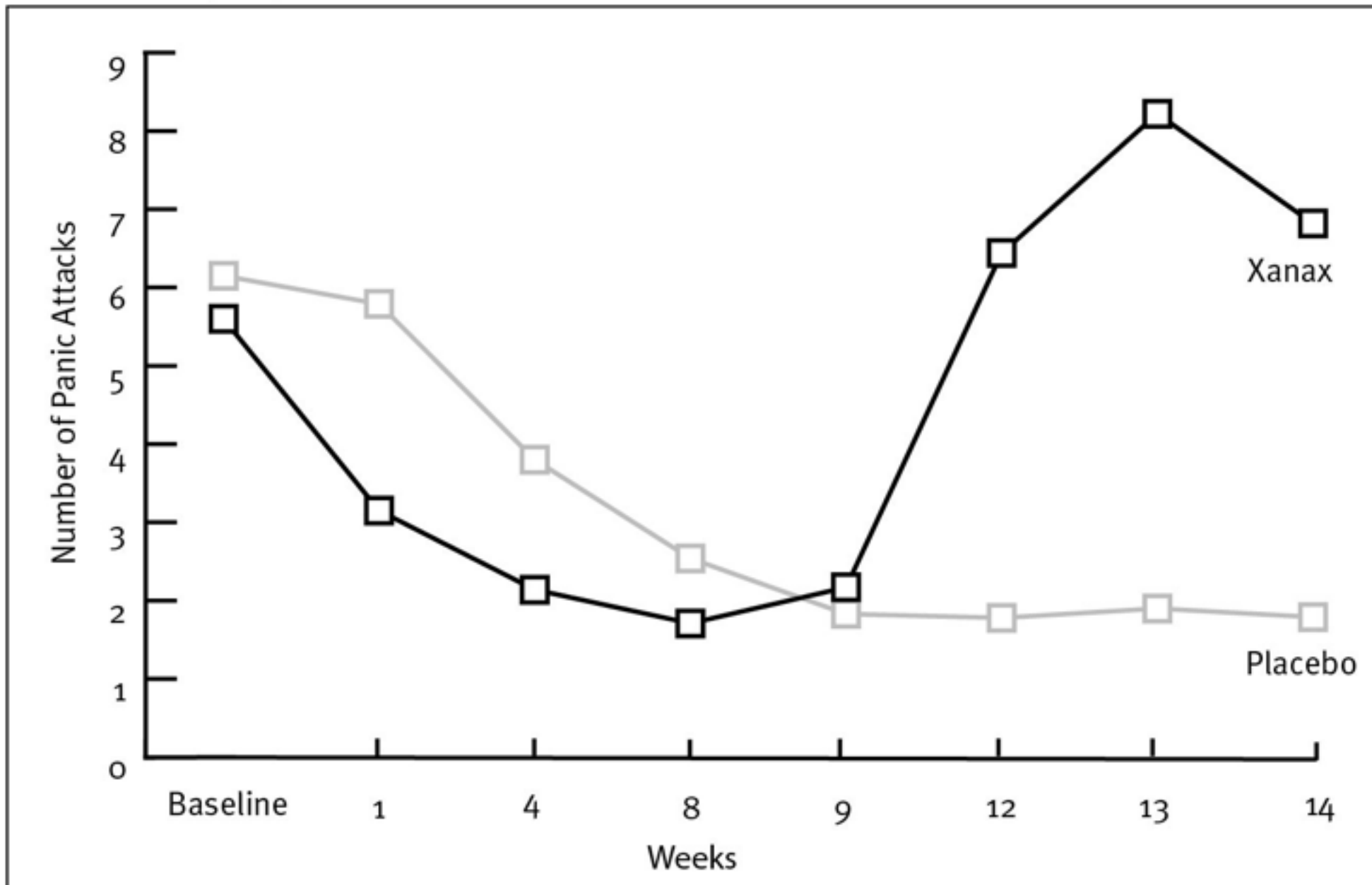
The Xanax Investigators Used This Data to Report Efficacy



The study of Xanax was designed to measure the efficacy of the drug versus placebo at the end of eight weeks. However, the investigators emphasized the results at the end of four weeks, when the drug provided a statistically significant benefit.

Source: C. Ballenger, "Alprazolam in panic disorder and agoraphobia," *Archives of General Psychiatry* 45 (1988):413-22.

And Downplayed the Data That Told of Harm Done



After eight weeks, those treated with Xanax were withdrawn from the medication. As this chart shows, the Xanax patients were much worse than the placebo patients at the end of the study.

Source: C. Ballenger, "Alprazolam in panic disorder and agoraphobia," *Arch Gen Psychiatry* 45 (1988):413-22. Also, C. Pecknold. "Alprazolam in panic disorder and agoraphobia." *Arch Gen Psychiatry* 45 (1988):429-36.

Assessment of Long-term Effects of Stimulants for ADHD, Early 1990s

“Stimulants do not produce lasting improvements in aggressivity, conduct disorder, criminality, education achievement, job functioning, marital relationships, or long-term adjustment.”

-- *APA's Textbook of Psychiatry*, 1994

The NIMH Mounts a Study to Assess Long-term Outcomes

- Known as the Multisite Multimodal Treatment Study of Children With ADHD
- Hailed as the “first major clinical trial” that the NIMH had ever conducted of “a childhood mental disorder.”
- At outset, the investigators wrote that “the long-term efficacy of stimulant medication has not been demonstrated for *any* domain of child functioning.”
- Diagnosed children were randomized to one of four treatment groups: medication alone, behavioral therapy, medication plus behavioral therapy, or routine community care.

14-Month Results from NIMH's MTA Study

At end of 14 months, “carefully crafted medication management” had proven to be superior to behavioral treatment in terms of reducing core ADHD symptoms. There was a hint that medicated children also did better on reading tests.

Conclusion: “Since ADHD is now regarded by most experts as a chronic disorder, ongoing treatment often seems necessary.”

Source: The MTA Cooperative Group, “A 14-month randomized clinical trial of treatment strategies for attention-deficit/hyperactivity disorder,” *Archives of General Psychiatry* 56 (1999):1073-86.

Three-Year Results from NIMH's MTA Study

In the abstract:

“By thirty-six months, the earlier advantage of having had fourteen months of the medication algorithm was no longer apparent, possibly due to age-related decline in ADHD symptoms, changes in medication management intensity, starting or stopping medication altogether, or other factors not yet evaluated.”

Source: Jensen, “A 3-year follow-up of the NIMH MTA study,” *J Amer Academy of Child & Adolescent Psychiatry* 46 (2007):989-1002.

Three-Year Results from NIMH's MTA Study

In the paper, if you read carefully:

At the end of 36 months, “medication use was a significant marker not of beneficial outcome, but of deterioration. That is, participants using medication in the 24-to-36 month period actually showed increased symptomatology during that interval relative to those not taking medication.” Medicated children were also slightly smaller, and had higher delinquency scores.

Source: Jensen, “A 3-year follow-up of the NIMH MTA study,” *J Amer Academy of Child & Adolescent Psychiatry* 46 (2007):989-1002.

Six-Year Results from MTA Study

In the abstract:

There were no significant differences between the medicated youth and the unmedicated youth at the end of six and eight years.

Source: Molina, "MTA at 8 years," *J Amer Academy of Child & Adolescent Psychiatry* 48 (2009):484-500.

Six-Year Results from MTA Study

In the discussion and a review of the data, if this part of the study is carefully read:

At end of six years, medication use was “associated with worse hyperactivity-impulsivity and oppositional defiant disorder symptoms,” and with greater “overall functional impairment.”

What the Public in the United States is Told About Longer-Term Use of Stimulants

ADHD Parents Medication Guide

To help families make important decisions about treatment, the National Institute of Mental Health began a large treatment study in 1992 called the Multimodal Treatment Study of Children with ADHD. Data from this 14-month study showed that stimulant medication is most effective in treating the symptoms of ADHD, as long as it is administered in doses adjusted for each child to give the best response—either alone or in combination with behavioral therapy. This is especially true when the medication dosage is regularly monitored and adjusted for each child.

Published by: *American Academy of Child and Adolescent Psychiatry*

Financial Disclosures of MTA Investigators

(Number of ties to pharmaceutical firms)

Investigator	Academic Affiliation	Research Funding	Advisory Board	Consultant	Speaker's Bureau
Peter Jensen, M.D.	Columbia Univ.	1		6	6
L. Eugene Arnold, M.D.	Ohio State Univ.	7		5	4
James Swanson, Ph.D.	U California, Irvine	12	11	14	9
Howard Abikoff, Ph.D.	New York Univ.	4		7	3
Laurence Greenhill, M.D.	Columbia Univ.			14*	
Lily Hechtman, M.D.	McGill Univ.	5	4		4
Glen Elliott, M.D.	Duke Univ.	4		2	3
Jeffrey Epstein, Ph.D.	U California, Irvine	4	1		2
Jeffrey Newcorn, M.D.	Mt. Sinai Medical School	8	16**		7
Timothy Wigal	U California, Irvine	4			2

*Research funding and consulting ties disclosed together. **Advisory board and consulting ties disclosed together.

Source: Disclosure statement in B. Molina, "MTA at 8 Years." *J Am Acad Child Adolesc Psychiatry* 48 (2009):484-500.

Suicide Data From TADS Study

	At 12 Weeks		12 to 36 Weeks		Total	
Initial Randomization	Suicidal Ideation	Suicidal Attempts	Suicidal Ideation	Suicidal Attempts	Suicidal Ideation	Suicidal Attempts
Non-Drug						
Placebo	5	0	1	6	6	6
CBT	4	1	0	2	4	3
Total Non-Drug	9	1	1	8	10	9
Fluoxetine						
Fluoxetine	9	3	1	3	10	6
Fluoxetine Plus CBT	3	2	3	1	6	3
Total Fluoxetine	12	5	4	4	16	9

Source: B. Vitiello. "Suicidal events in the treatment for adolescents with depression." *J Clin Psychiatry* 70 (2009): 741–7.

Conclusion

There is no “evidence of medication-induced behavioral activation as a precursor” to a suicidal event.

Source: B. Vitiello. “Suicidal events in the treatment for adolescents with depression.” *J Clin Psychiatry* 70 (2009): 741–7.

The TADS Suicide Data By Drug Exposure

	At 12 Weeks		12 to 36 Weeks		Total	
	Suicidal Ideation	Suicidal Attempts	Suicidal Ideation	Suicidal Attempts	Suicidal Ideation	Suicidal Attempts
Non-Drug						
Placebo	3	0	0	0	3	0
CBT	4	1	0	0	4	1
Total Non-Drug	7	1	0	0	7	1
Fluoxetine						
Randomized to Placebo	2	0	1	6	3	6
Randomized to CBT				2		2
Randomized to Fluoxetine	9	3	1	3	10	6
Randomized to Fluoxetine Plus CBT	3	2	3	1	6	3
Total on Drug	14	5	6	12	19	17

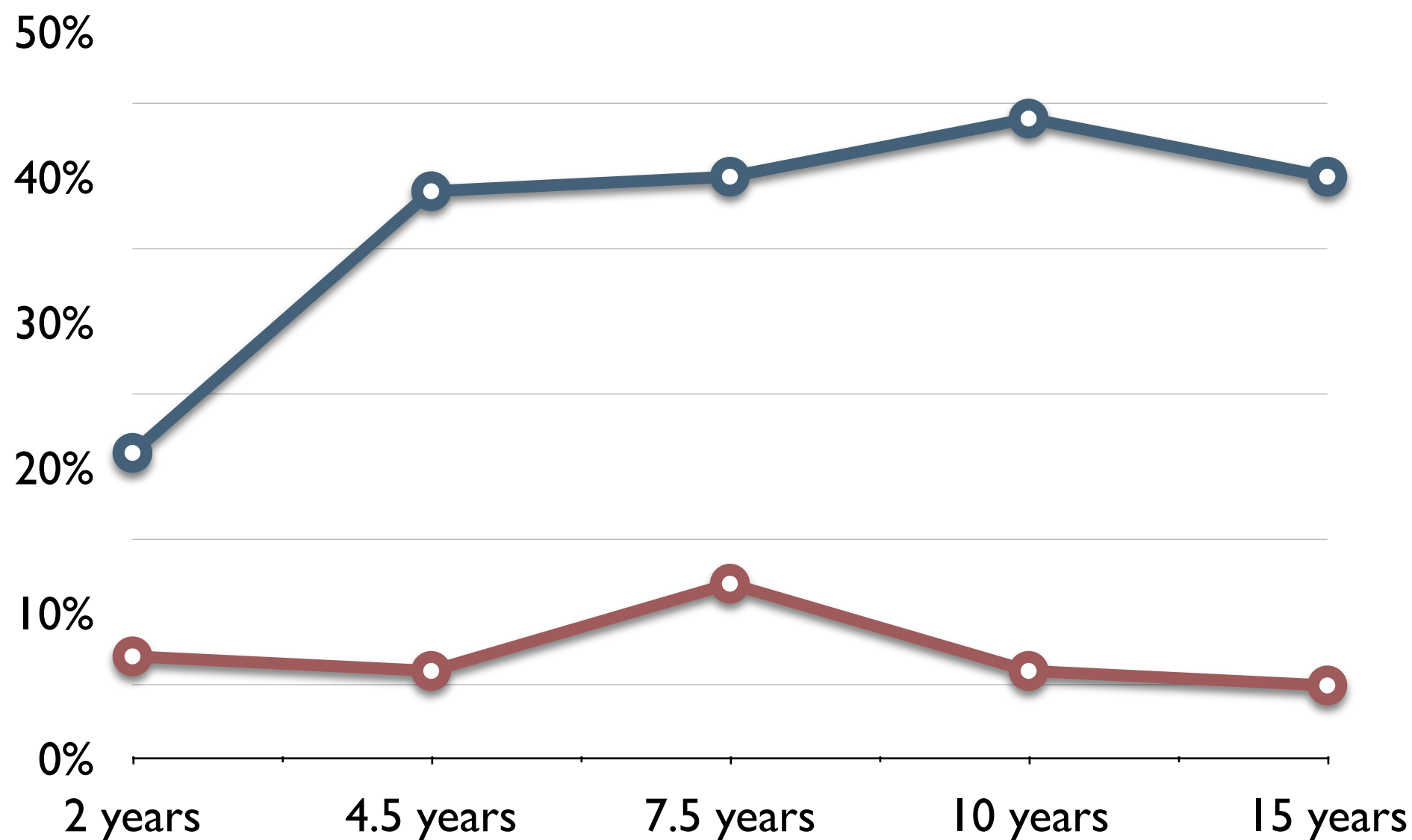
Source: B. Vitiello. "Suicidal events in the treatment for adolescents with depression." *J Clin Psychiatry* 70 (2009): 741–7.

Financial Conflicts of Interest in TADS Study

- Five of the principal investigators in the TADS study had served on Eli Lilly's speaker's bureau.
- Six more reported other types of financial ties to Eli Lilly: honorariums, research support, and consulting contracts.

Have you heard about this NIMH study?

Long-term recovery rates for schizophrenia patients



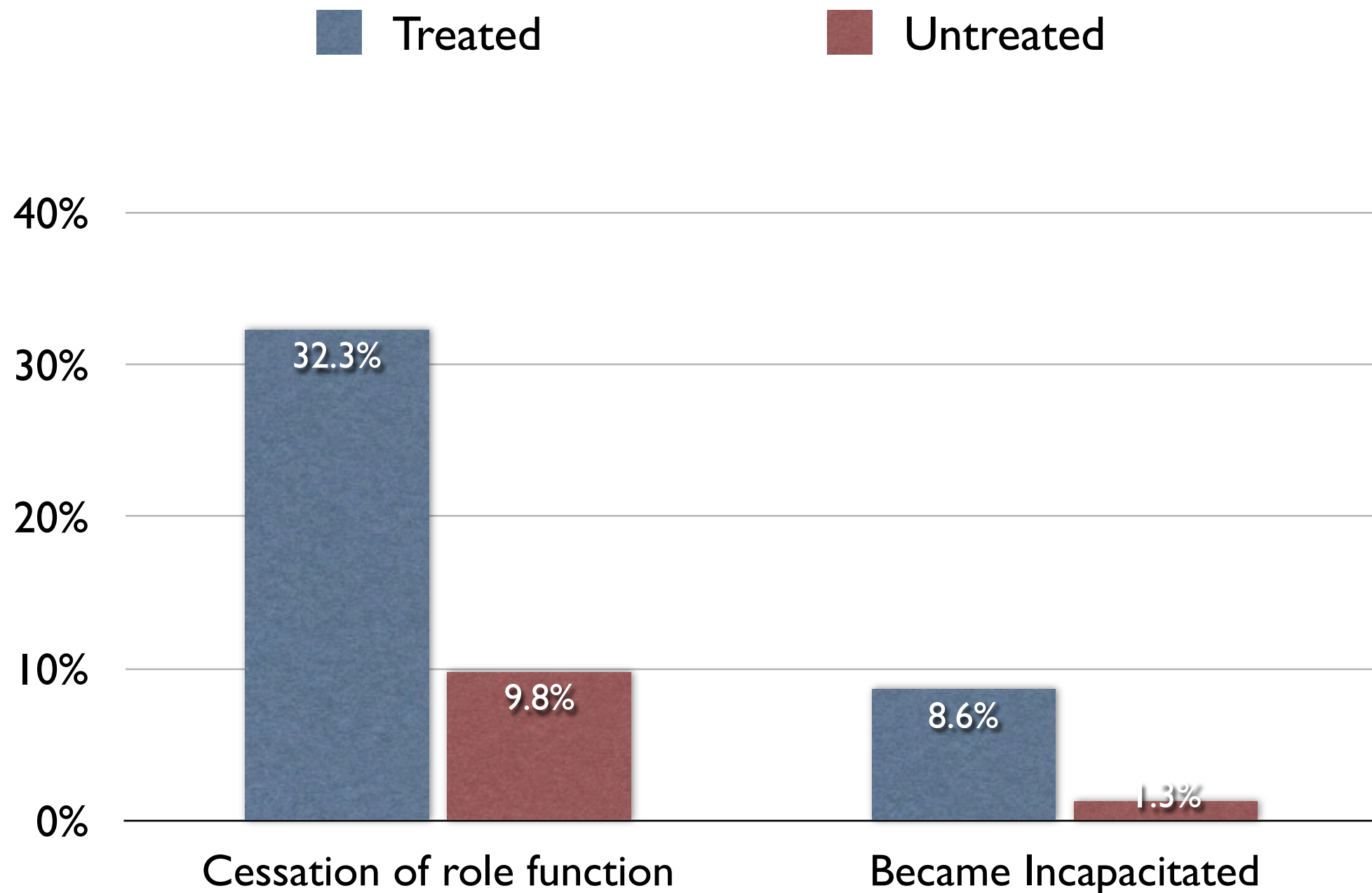
Source: Harrow M. "Factors involved in outcome and recovery in schizophrenia patients not on antipsychotic medications." *Journal of Nervous and Mental Disease* 195 (2007):406-14.

“I conclude that patients with schizophrenia not on antipsychotic medication for a long period of time have significantly better global functioning than those on antipsychotics.”

--Martin Harrow, American Psychiatric Association annual meeting, 2008

Or This One?

NIMH's Six-Year Study of Untreated Depression



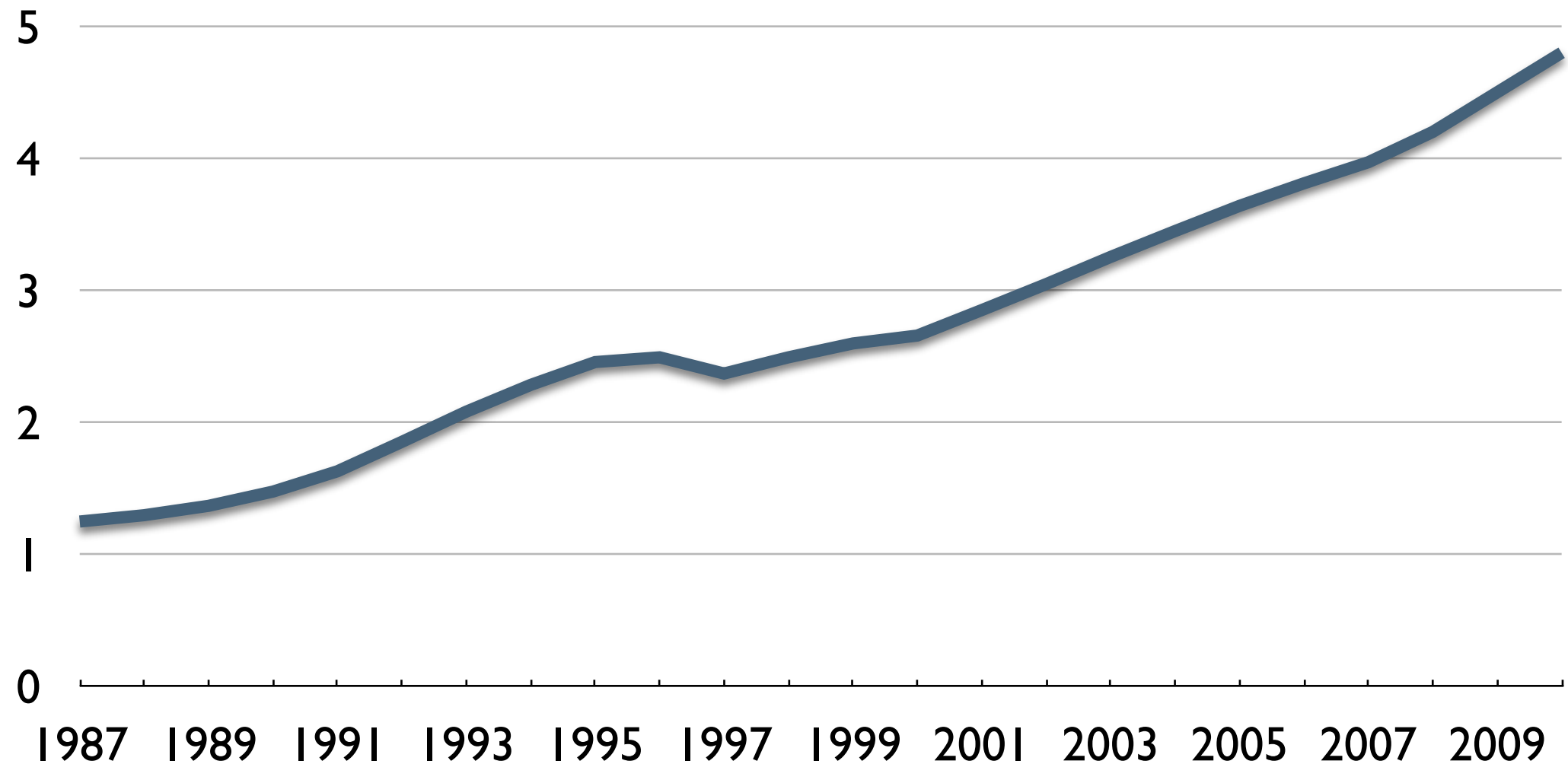
Source: W. Coryell. "Characteristics and significance of untreated major depressive disorder." *American Journal of Psychiatry* 152 (1995):1124-29.

What is the Social Injury?

- Societal delusion: We believe chemical imbalances in the brain are the cause of mental disorders when science has not found that to be so.
- This means that the profession has not provided informed consent to its patients for the past three decades.
- The medicalization of childhood.
- A mounting burden of mental illness in societies that have adopted a drug-based paradigm of care.
- An impoverished philosophy of being for all of society

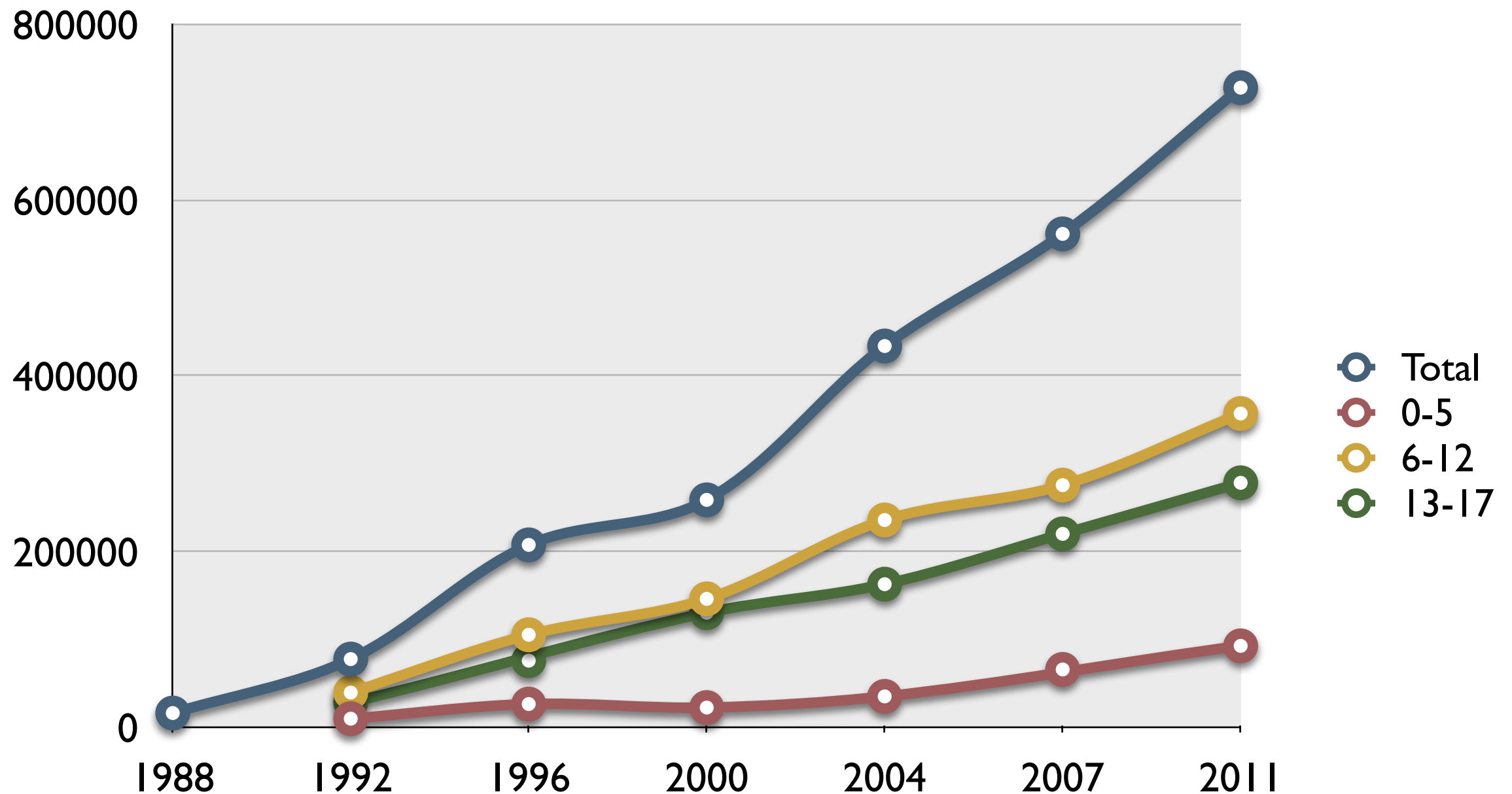
U.S. Disability in the Prozac Era

Millions of adults, 18 to 66 years old



Source: U.S. Social Security Administration Reports, 1987-2010

U.S. Children on Government Disability Due to Mental Illness, 1987-2011



Prior to 1992, the government's SSI reports did not break down recipients into subgroups by age. Source: Social Security Administration reports, 1988-2007.

**What is Needed? How Can We Correct
this Institutional Corruption?**