

Psychotropics - The Other Side of Antipsychotic Medication Dogma

Jeffrey E. Hansen, Ph.D.



“The views expressed are those of the author and do not reflect the official policy of the Department of the Army, the Department of Defense, or the U.S. Government.”

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Mad in America

SCIENCE, PSYCHIATRY AND SOCIAL JUSTICE



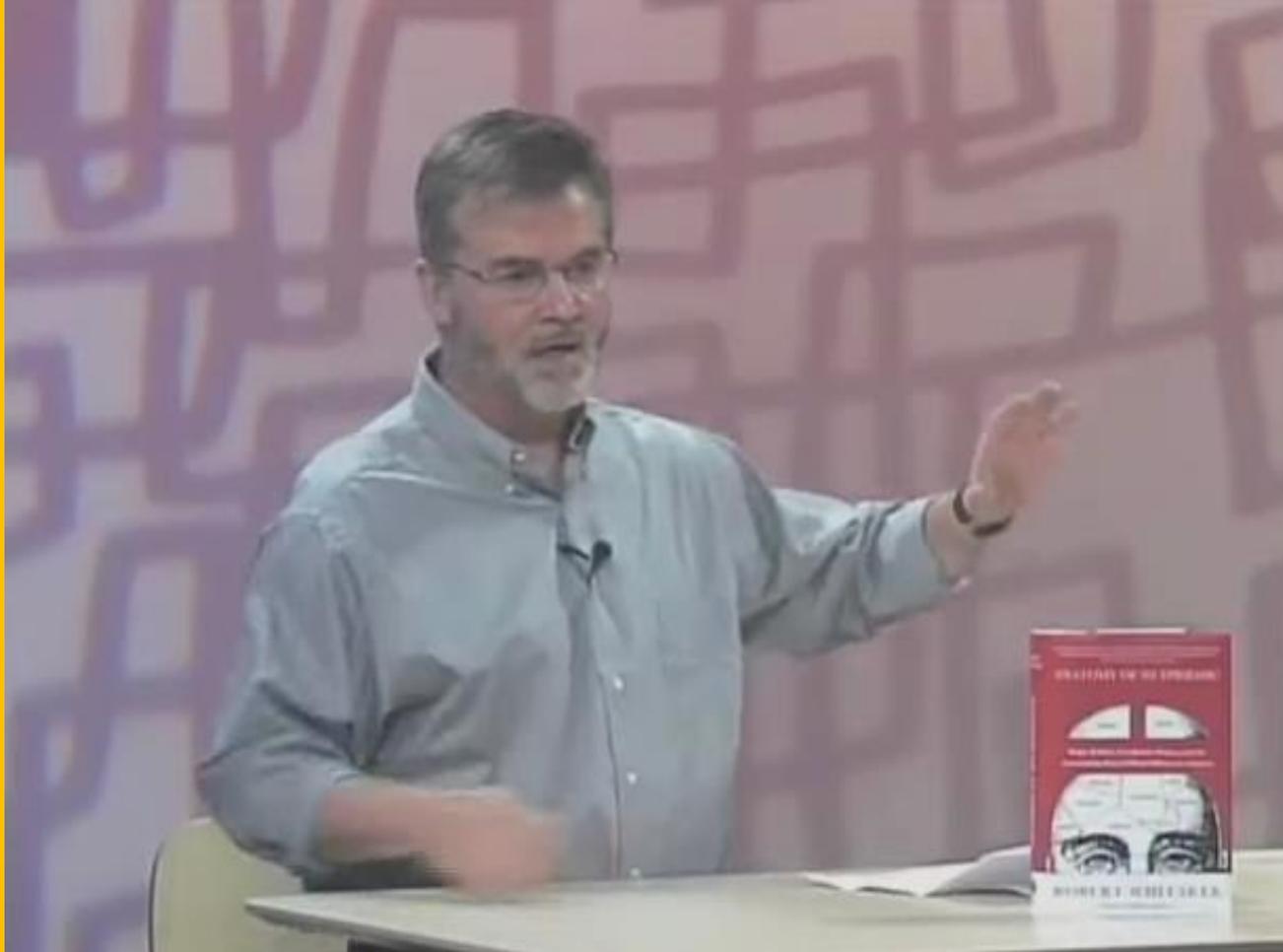
Mission Statement

Mad in America's mission is to serve as a catalyst for rethinking psychiatric care in the United States (and abroad). We believe that the current drug-based paradigm of care has failed our society, and that scientific research, as well as the lived experience of those who have been diagnosed with a psychiatric disorder, calls for profound change.

Psychotropics - The Other Side of Antipsychotic Medication Dogma

We are at a time when it is a good thing to evaluate the efficacy of psychotropic medications. This PowerPoint summarizes the work of **Robert Whitaker**, a medical journalist, and **Dr. Joanna Moncrieff**, Professor of Critical and Social Psychiatry, who have written and spoken about the need to re-think how we are treating mental illness, in particular, the use of psychotropics with emphasis on antipsychotics. Although they acknowledge that psychotropics have a use, they suggest that these medications should be used more judiciously and, in many cases, there is reason to be concerned that long-term use can have a significant and concerning downside.

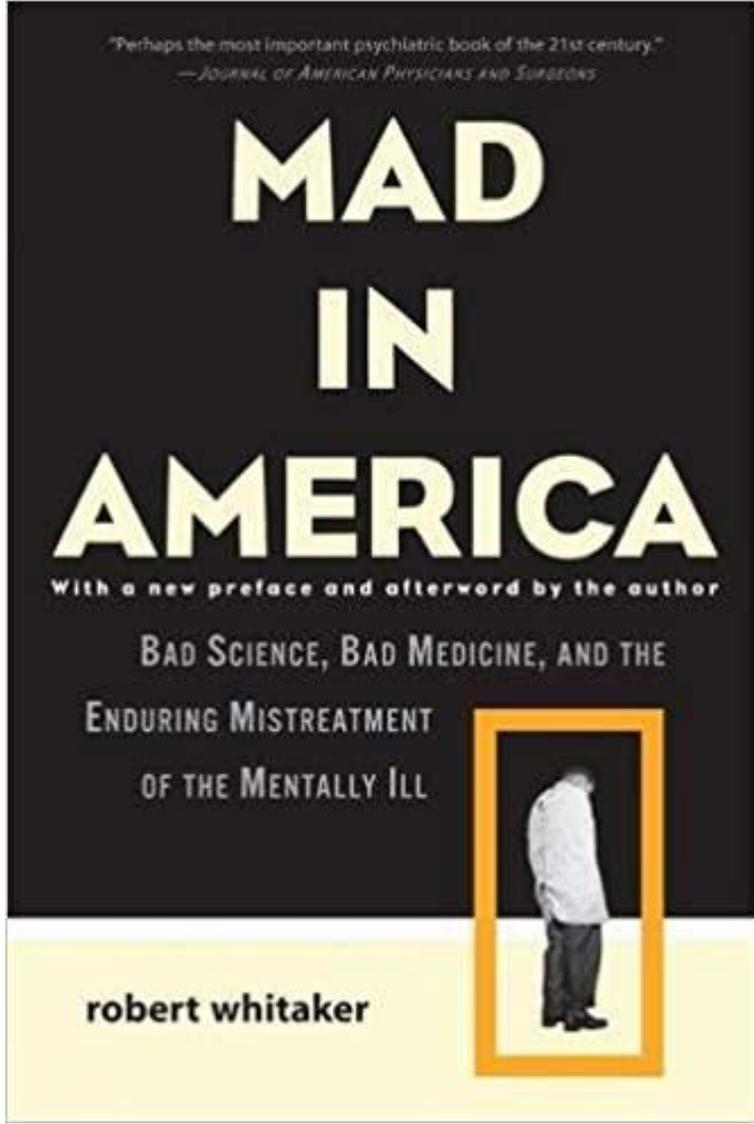
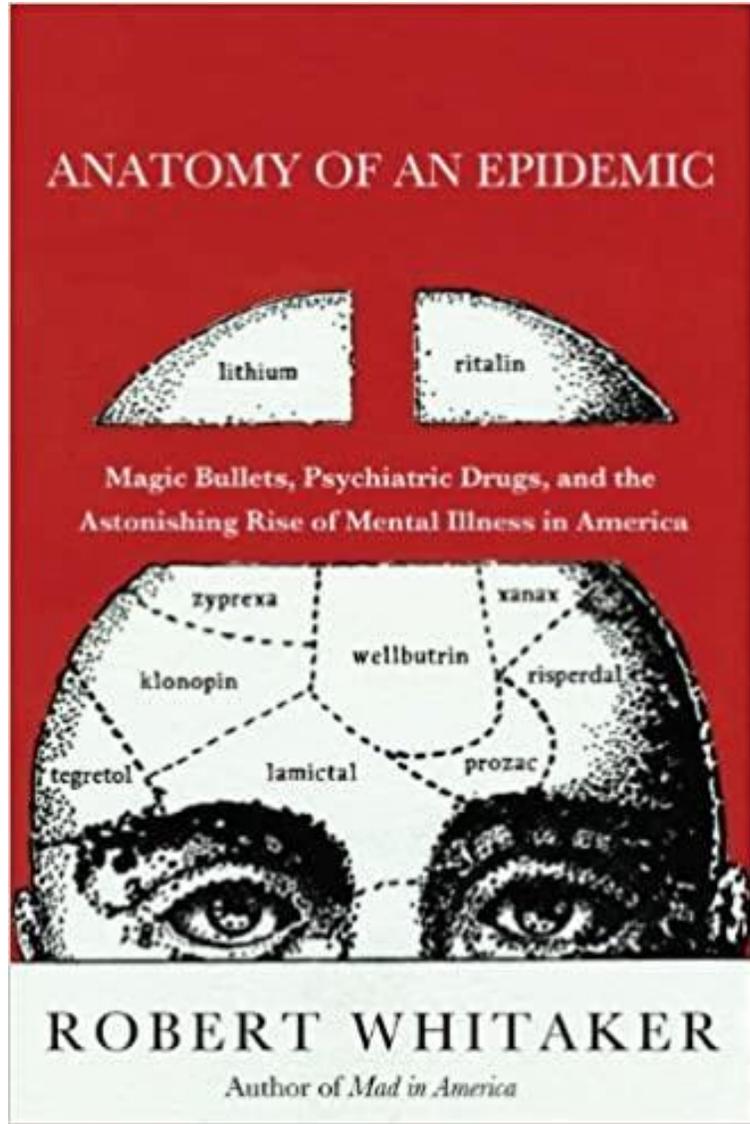
Please note that I am not a prescriber, and I am not advising you to take or not take these medications. Rather, I am offering some of the research on the mechanisms and outcomes of their use to help you form your own opinion.



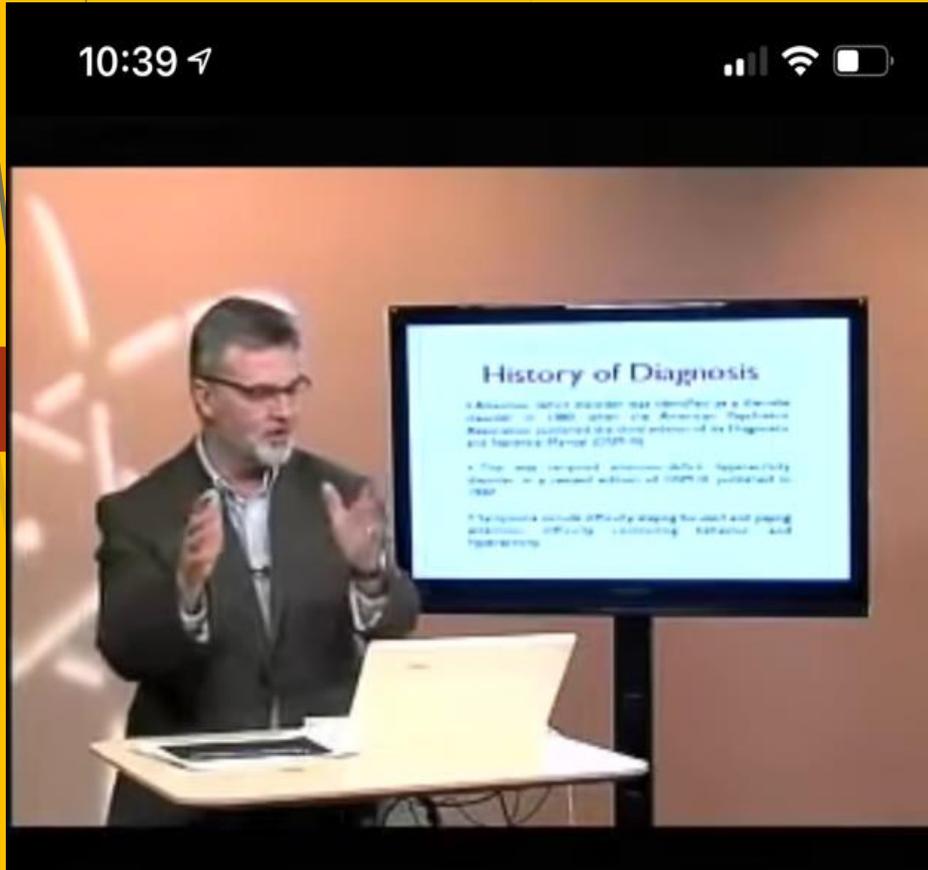
► **Robert Whitaker** is an American journalist and author who has won numerous awards as a journalist covering medicine and science, including the George Polk Award for Medical Writing and a National Association for Science Writers' Award for best magazine article. In 1998, he co-wrote a series on psychiatric research for the Boston Globe that was a finalist for the Pulitzer Prize for Public Service. His first book, *Mad in America*, was named by *Discover* magazine as one of the best science books of 2002. *Anatomy of an Epidemic* won the 2010 Investigative Reporters and Editors book award for best investigative journalism. He is the publisher of [madinamerica.com](http://www.madinamerica.com).

► Robert Whitaker's website:

<https://www.madinamerica.com/author/rwhitaker/>



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The content of the first part of this PowerPoint is largely from Robert Whitaker's excellent YouTube videos:

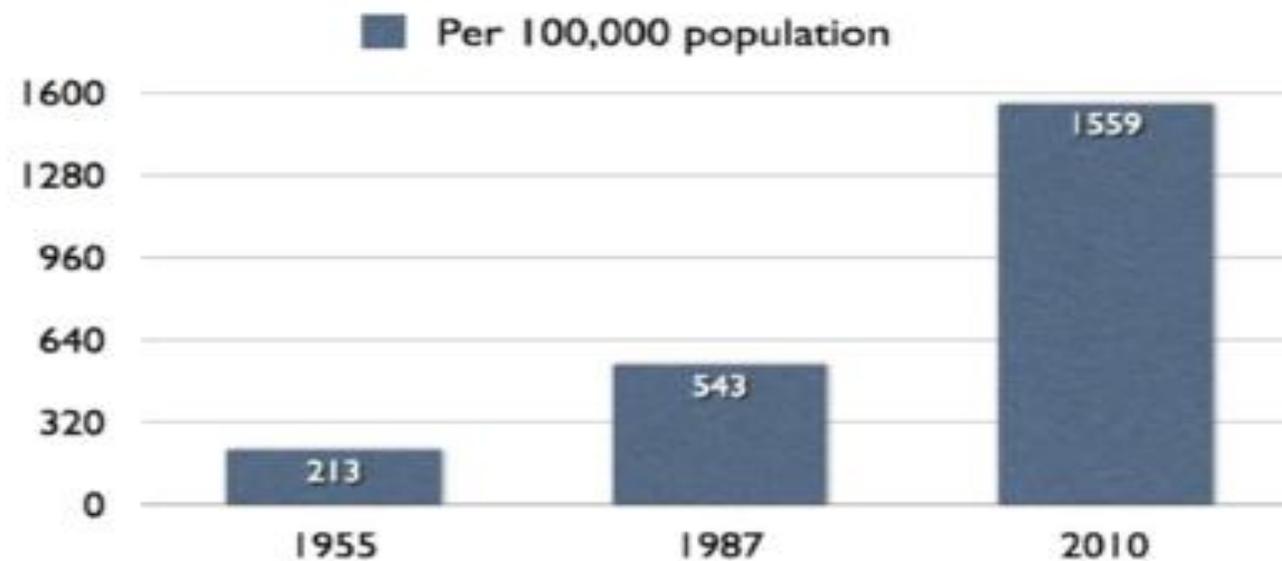
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The Disabled Mentally Ill in the United States

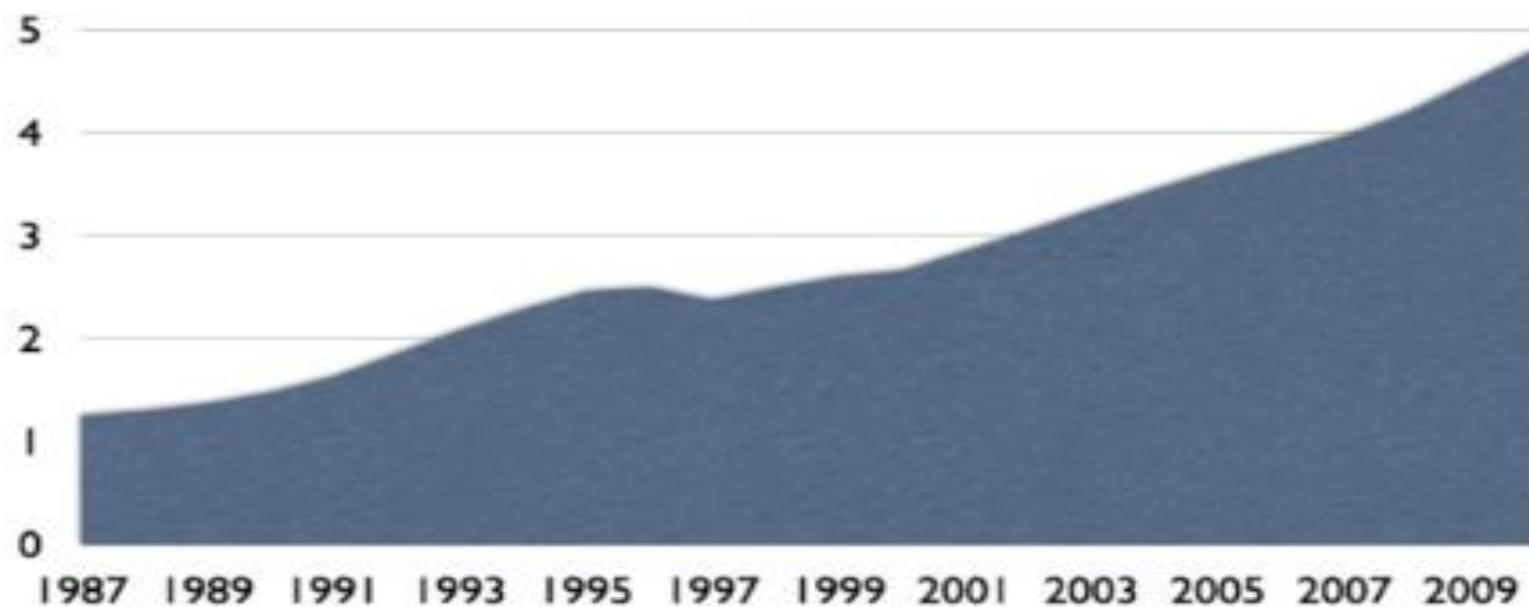
(under government care)



Source: Silverman, C. *The Epidemiology of Depression* (1968): 139. U.S. Social Security Administration Reports, 1987-2007.

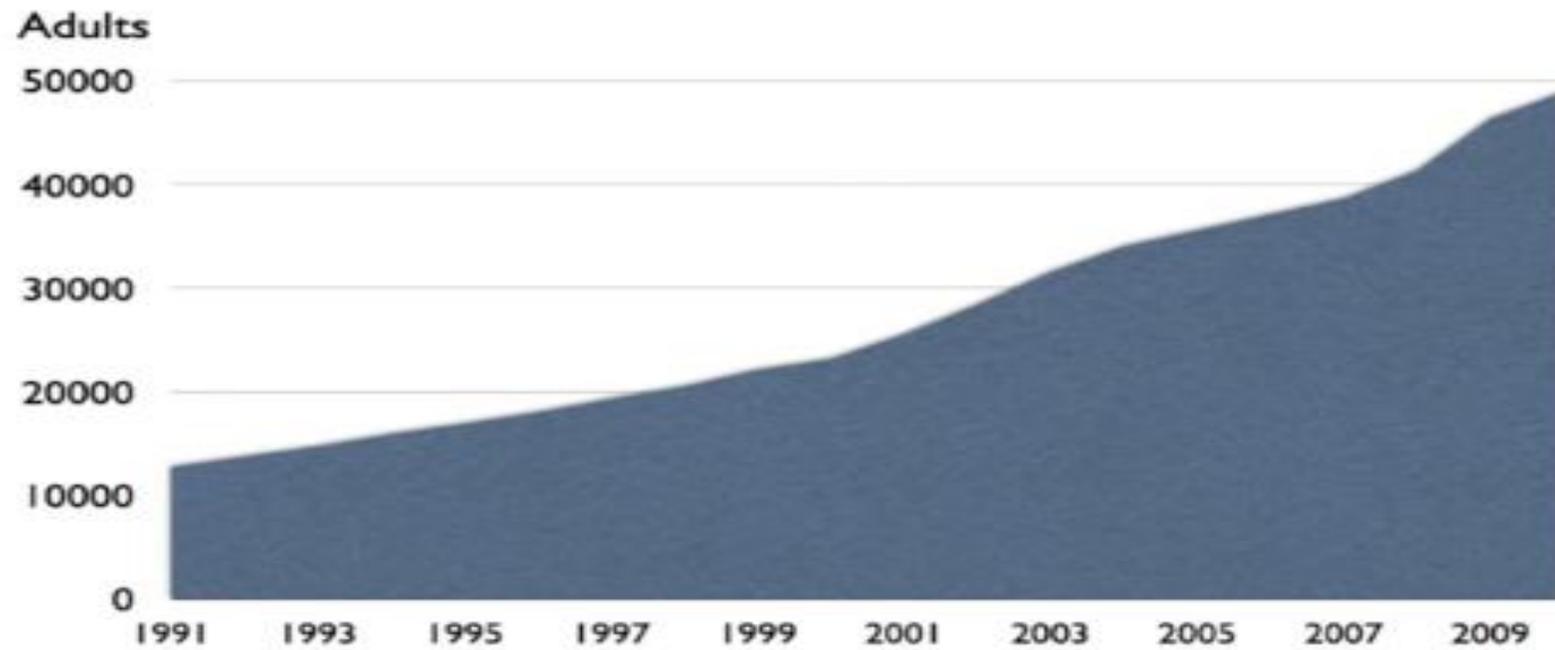
U.S. Disability in the Prozac Era

Millions of adults, 18 to 66 years old



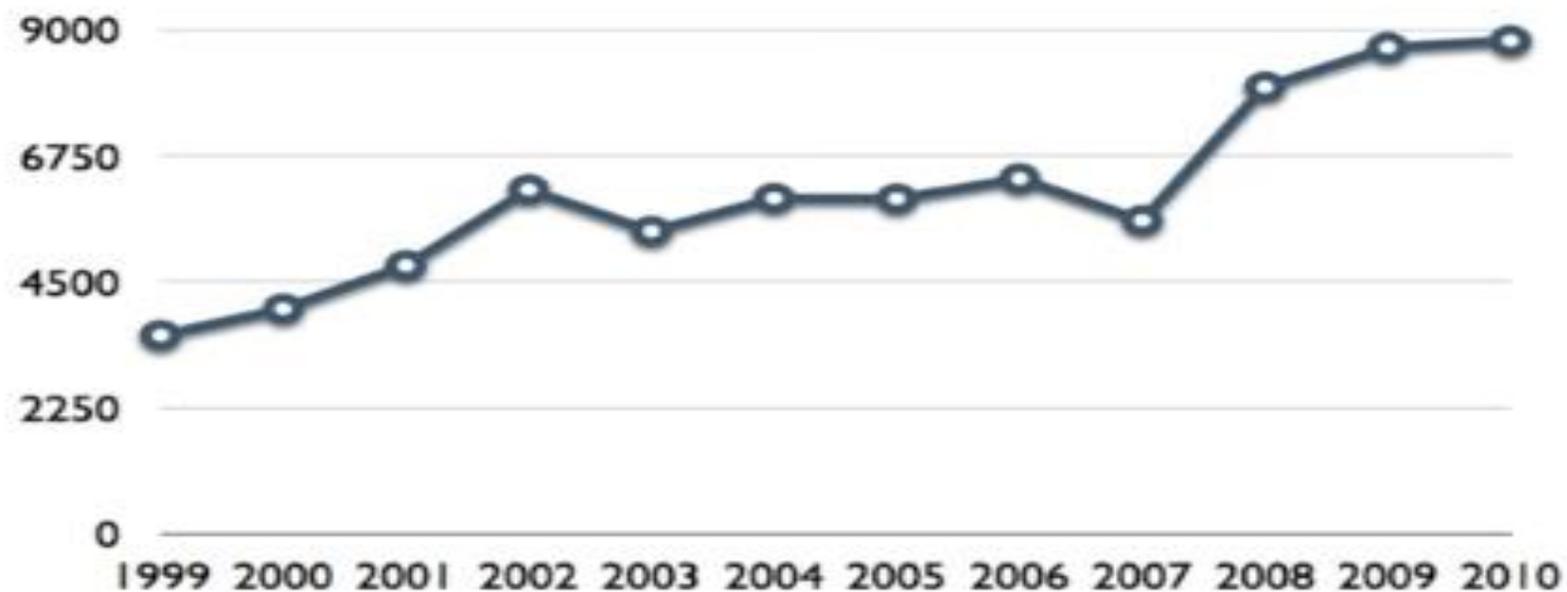
Source: U.S. Social Security Administration Reports, 1987-2010

Disability Due to Psychiatric Disorders in New Zealand, 1991-2010



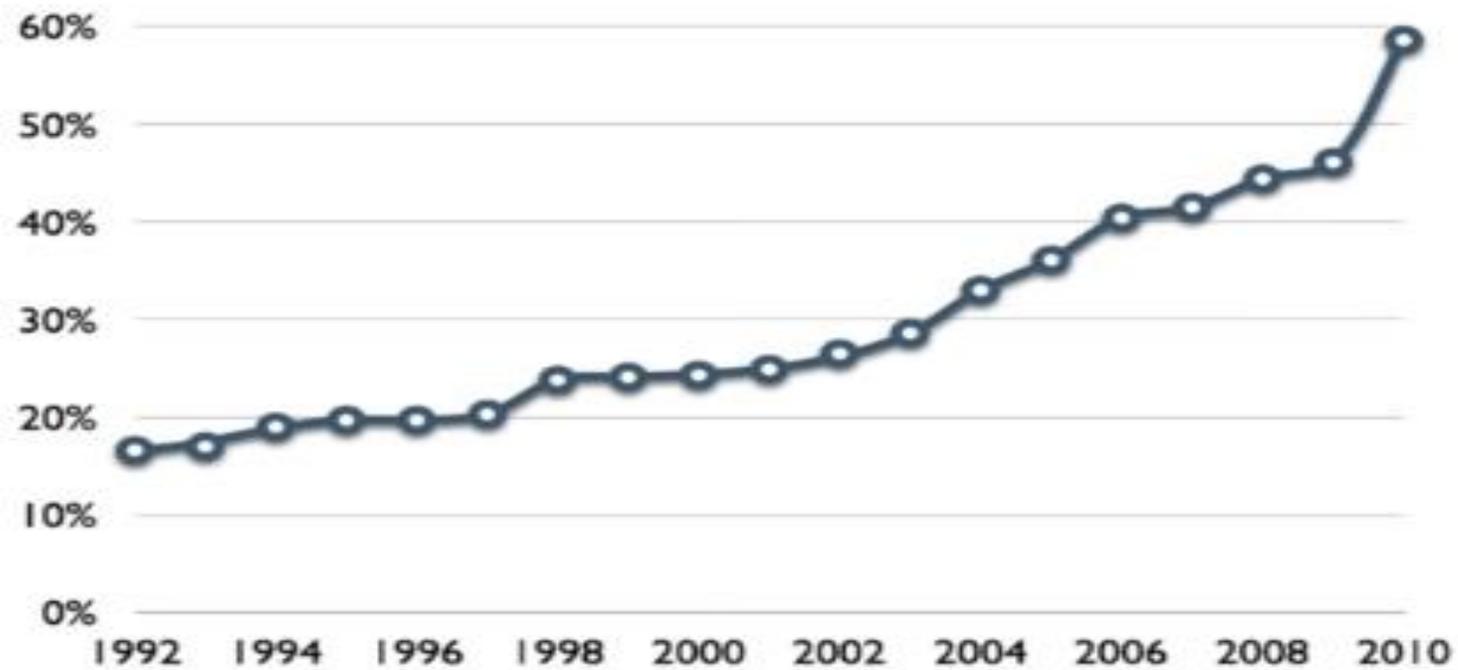
Source: Statistics New Zealand, Annual reports, 1999-2010

New Cases of Disability in Denmark Due to Mental Illness



Source: Danish government, The Appeals Board, Statistics on Early Retirement.

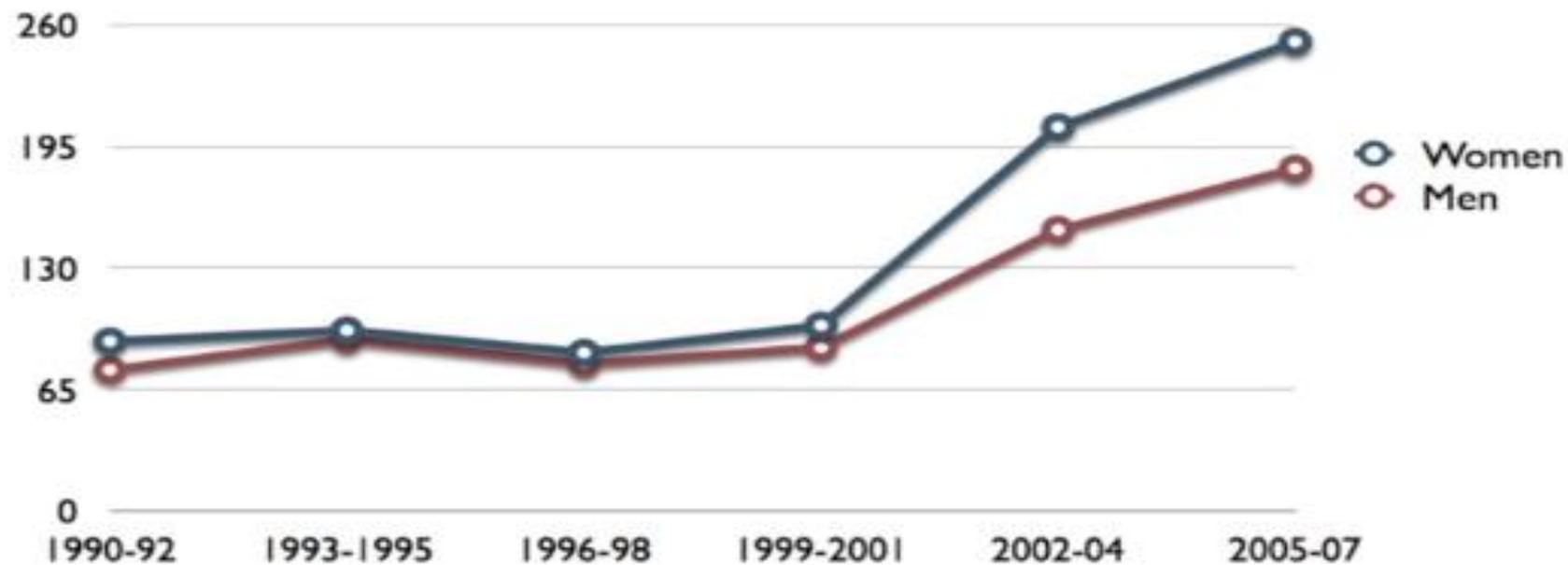
Percentage of All New Disability Cases in Sweden That Are Due to Mental Illness



Source: OECD, Mental Health and Work: Sweden, 2013.

Disability Due to Mental and Behavioural Disorders in Iceland, 1990-2007

Number of New Cases Annually per 100,000 Population



Source: Thoriacius, S. "Increased incidence of disability due to mental and behavioural disorders in Iceland, 1990-2007." *J Ment Health* (2010) 19: 176-83.

The Chemical Imbalance Theory of Mental Disorders

- Arose from understanding of how drugs act on brain (1960s-1970s)
- Investigations of dopamine theory of schizophrenia and serotonin theory of depression started in 1970s

Findings re the Chemical Imbalance Theory of Mental Disorders

A. Serotonin Theory of Depression

“Elevations or decrements in the functioning of serotonergic systems per se are not likely to be associated with depression.” --NIMH, 1984.

“There is no clear and convincing evidence that monoamine deficiency accounts for depression; that is, there is no real monoamine deficit.”--Stephen Stahl, *Essential Psychopharmacology*, 2000

B. 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

C. 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.

“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*.

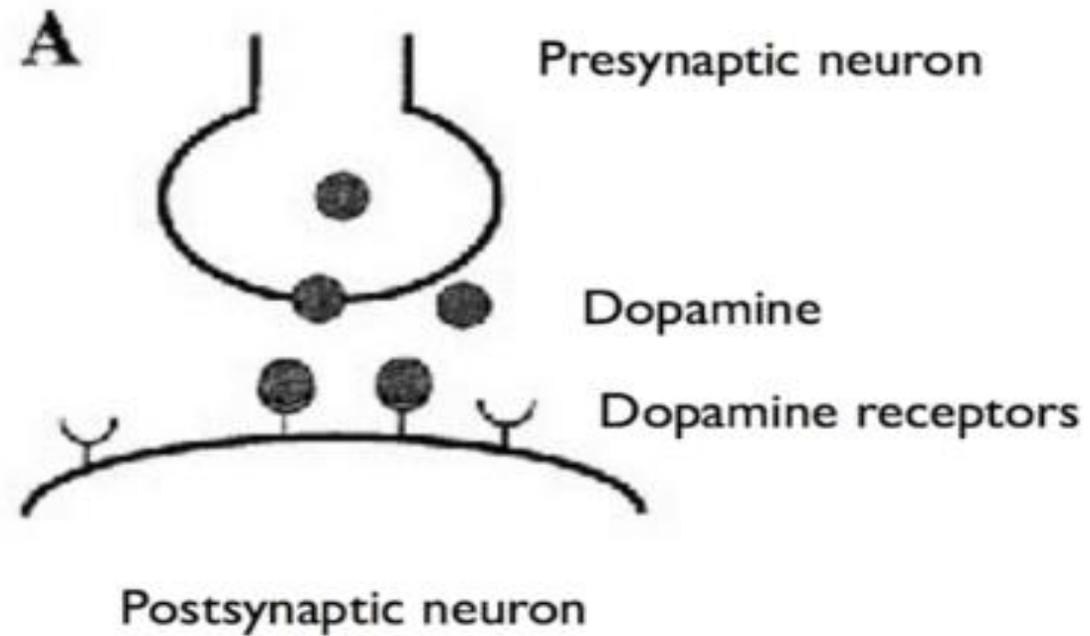
A Paradigm for Understanding Psychotropic Drugs

Stephen Hyman, former director of the NIMH, 1996:

- Psychiatric medications “create perturbations in neurotransmitter functions.”
- In response, the brain goes through a series of compensatory adaptations in order “to maintain their equilibrium in the face of alterations in the environment or changes in the internal milieu.”
- The “chronic administration” of the drugs then cause “substantial and long-lasting alterations in neural function.”
- After a few weeks, the person’s brain is now functioning in a manner that is “qualitatively as well as quantitatively different from the normal state.”

Source: Hyman, S. “Initiation and adaptation: A paradigm for understanding psychotropic drug action.” *Am J Psychiatry* 153 (1996):151-61.

Dopamine function before exposure to antipsychotics



The Possible Consequences of “Oppositional Tolerance”

“Continued drug treatment may induce processes that are the opposite of what the medication originally produced.” This may “cause a worsening of the illness, continue for a period of time after discontinuation of the medication, and may not be reversible.”

-Rif El-Mallakh, University of Louisville, 2011

Source: El-Mallakh, R. “Tardive dysphoria: The role of long-term antidepressant use in inducing chronic depression.” *Medical Hypotheses* 76 (2011): 769-773.

What's Missing From The Evidence Base?

- A. It does not provide evidence that antipsychotics improve the long-term course of schizophrenia (or other psychotic disorders,) particularly in regard to functional outcomes.
- B. The relapse studies reflect risks associated with drug-withdrawal effects, rather than just the return of the natural course of the disorder. (Most relapse studies involved abrupt withdrawal of the medication.)
- C. Physicians today no longer have clinical experience with the long-term course of schizophrenia patients off medication.

Recognition that the Evidence Base For Long-term Use of Antipsychotics is Lacking

“After fifty years of neuroleptics, are we able to answer the following simple question: Are neuroleptics effective in treating schizophrenia? [There is] no compelling evidence on the matter, when ‘long-term’ is considered.”

And:

“If we wish to base psychiatry on evidence-based medicine, we run a genuine risk in taking a close look at what has long been considered fact.”

--Emmanuel Stip, *European Psychiatry* (2002)

A Paradox Appears (1960s-1970s)

- In the first long-term trial by the National Institute of Mental Health (one-year), the rehospitalization rate was higher for those treated initially in the hospital with an antipsychotic. (1967)
- In a retrospective study by Sanford Bockoven, the five-year outcomes of psychotic patients treated in 1947 (prior to antipsychotics) were markedly better than for a comparable group of patients treated in 1967 with antipsychotics.
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The Oppositional Tolerance Question is Raised by NIMH Researchers, in 1977:

“There is no question that, once patients are placed on medication, they are less vulnerable to relapse if maintained on neuroleptics. But what if these patients had never been treated with drugs to begin with? . . . We raise the possibility that antipsychotic medication may make some schizophrenic patients more vulnerable to future relapse than would be the case in the normal course of the illness.”

Source: Carpenter, W. "The treatment of acute schizophrenia without drugs." *Am J Psychiatry* 134 (1977):14-20.

The Dopamine Supersensitivity Theory

The Mechanism:

Antipsychotics block D2 receptors in the brain. As a compensatory response, the brain then increases the density of its D2 receptors by 30% or more.

The Consequence:

Two Canadian investigators at McGill University, Guy Chouinard and Barry Jones, reasoned that this made the patient more biologically prone to psychosis, and to worse relapses upon drug withdrawal.

“Neuroleptics can produce a dopamine supersensitivity that leads to both dyskinesic and psychotic symptoms . . . An implication is that the tendency toward psychotic relapse in a patient who has developed such a supersensitivity is determined by more than just the normal course of the illness.”

Source: Chouinard, G. “Neuroleptic-induced supersensitivity psychosis,” *Am J Psychiatry* 135 (1978): 1409-10; and “Neuroleptic-induced supersensitivity psychosis,” *Am J Psychiatry* 137 (1980): 16-20.

Study of Drug-Induced Tardive Psychosis

In 1982, Chouinard and Jones reported that 30% of the 216 schizophrenia outpatients they studied showed sign of tardive psychosis, which meant their psychosis was becoming chronic. When this happens, they wrote, “the illness appears worse” than ever before. “New schizophrenic symptoms of greater severity will appear.”

Source: Chouinard, C. “Neuroleptic-induced supersensitivity psychosis, the ‘Hump Course,’ and tardive dyskinesia.” *J Clin Psychopharmacology* 2 (1982):143-44. Also, Chouinard, C. “Severe cases of neuroleptic-induced supersensitivity psychosis,” *Schiz Res* 5 (1991):21-33.

WHO Cross-Cultural Studies, 1970s/1980s

- In both studies, which measured outcomes at the end of two years and five years, the patients in the three developing countries, India, Nigeria, and Colombia, had a “considerably better course and outcome” than in the U.S. and six other developed countries.
- The WHO researchers concluded that “being in a developed country was a strong predictor of not attaining a complete remission.”
- They also found that “an exceptionally good social outcome characterized the patients” in developing countries.

Source: Jablensky, A. "Schizophrenia, manifestations, incidence and course in different cultures." *Psychological Medicine* 20, monograph (1992): 1-95.

WHO Findings, Continued

Medication usage:

16% of patients in the developing countries were regularly maintained on antipsychotics, versus 61% of the patients in rich countries.

15-year to 20-year followup:

The “outcome differential” held up for “general clinical state, symptomatology, disability, and social functioning.” In the developing countries, 53% of schizophrenia patients were “never psychotic” anymore, and 73% were employed.

Source: Jablensky, A. “Schizophrenia, manifestations, incidence and course in different cultures.” *Psychological Medicine* 20, monograph (1992):1-95. See table on page 64 for medication usage. For followup, see Hopper, K. “Revisiting the developed versus developing country distinction in course and outcome in schizophrenia.” *Schizophrenia Bulletin* 26 (2000):835-46.

Animal Models of Psychosis and Drug-Induced Dopamine Supersensitivity

In 2005, Philip Seeman at the University of Toronto reported that agents that trigger psychotic-like behavior in animals -- amphetamines, angel dust, lesions to the hippocampus, gene-knockout manipulations -- all cause an increase in D2 receptors that have a "high" affinity for dopamine. These results "imply that there may be many pathways to psychosis, including multiple gene mutations, drug abuse, or brain injury, all of which may converge via D2 HIGH to elicit psychotic symptoms," Seeman wrote.

Source: Seeman, P. "Dopamine supersensitivity correlates with D2 HIGH states, implying many paths to psychosis." *Proceedings of the Nat Acad of Science* 102 (2005): 3513-18. Samaha, A. "Breakthrough dopamine supersensitivity during ongoing antipsychotic treatment leads to treatment failure over time." *J Neuroscience* 27 (2007):2979-86.

Philip Seeman Tests His D2 High Theory

In rat studies, “we show that during ongoing treatment with clinically relevant doses, haloperidol and olanzapine progressively lose their efficacy . . . the loss of efficacy is linked to an increase in D2 receptor number and sensitivity. These results are the first to demonstrate that ‘breakthrough’ supersensitivity during ongoing antipsychotic treatment undermines treatment efficacy.”

Source: Samaha, A. “Breakthrough dopamine supersensitivity during ongoing antipsychotic treatment leads to treatment failure over time.” *J Neuroscience* 27 (2007):2979-86.

Nancy Andreasen's MRI Study

In 2003, Andreasen reported that schizophrenia was a “progressive neurodevelopmental disorder” characterized by “progressive reduction in frontal white matter volume.” This decline in brain volumes was seen in MRI imaging tests.

Source: Ho, B. "Progressive structural brain abnormalities and their relationship to clinical outcome." *Arch Gen Psych* 60 (2003):585-94.

In 2003 and 2005, Andreasen reported that this brain shrinkage was associated with a worsening of negative symptoms, increased functional impairment, and, after five years, cognitive decline.

Source: Ho, B. "Progressive structural brain abnormalities and their relationship to clinical outcome." *Arch Gen Psych* 60 (2003):585-94. Andreasen, N. "Longitudinal changes in neurocognition during the first decade of schizophrenia illness." *International Congress on Schizophrenia Research* (2005):348.

In 2011, Andreasen reported that this shrinkage was drug-related. Use of the old neuroleptics, the atypical antipsychotics, and clozapine were all “associated with smaller brain tissue volumes,” with decreases in both white and grey matter. The severity of illness and substance abuse had “minimal or no effect” on brain volumes.

Ho, B. “Long-term antipsychotic treatment and brain volumes.” *Arch Gen Psychiatry* 68 (2011):128-37.

MRI Study in Macaque Monkeys

Finding:

- In macaque monkeys, treatment with either haloperidol or olanzapine for 17 to 27 months led to a “8-11% reduction in mean fresh brain weights” compared to controls.
- The differences (in brain weights and brain volumes) “were observed across all major brain regions, but appeared most robust in the frontal and parietal regions.”

Source: Dorph-Petersen. “The influence of chronic exposure to antipsychotic medications on brain size before and after tissue fixation.” *Neuropsychopharmacology* (2005) 30: 1649-1661.

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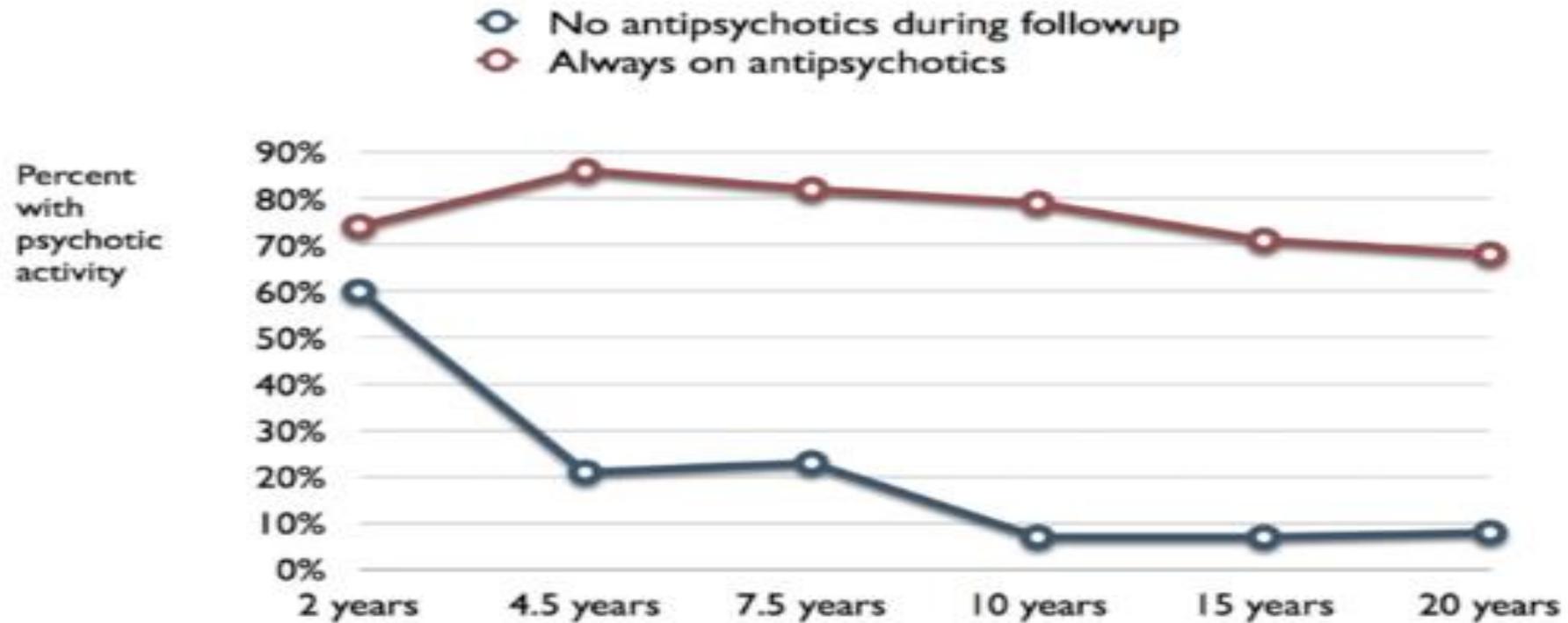
Martin Harrow's Long-Term Study of Psychotic Patients

Patient Enrollment

- 64 schizophrenia patients
- 81 patients with other psychotic disorders
 - 37 psychotic bipolar patients
 - 28 unipolar psychotic patients
 - 16 other milder psychotic disorders
- Median age of 22.9 years at index hospitalization
- Previous hospitalization
 - 46% first hospitalization
 - 21% one previous hospitalization
 - 33% two or more previous hospitalizations

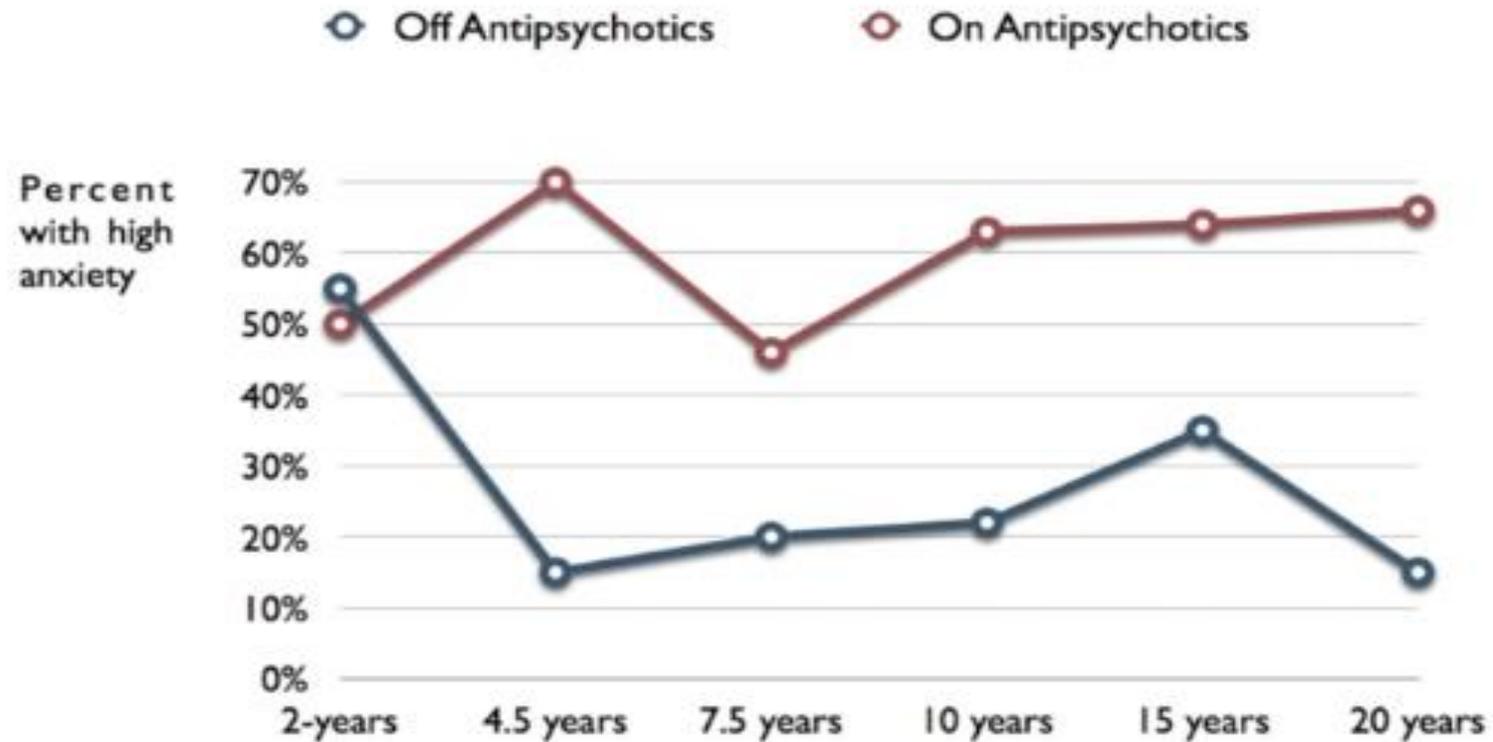
Source: Harrow M. "Factors involved in outcome and recovery in schizophrenia patients not on antipsychotic medications." *Journal of Nervous and Mental Disease* 195 (2007):406-14.

Psychotic Symptoms of Schizophrenia Patients



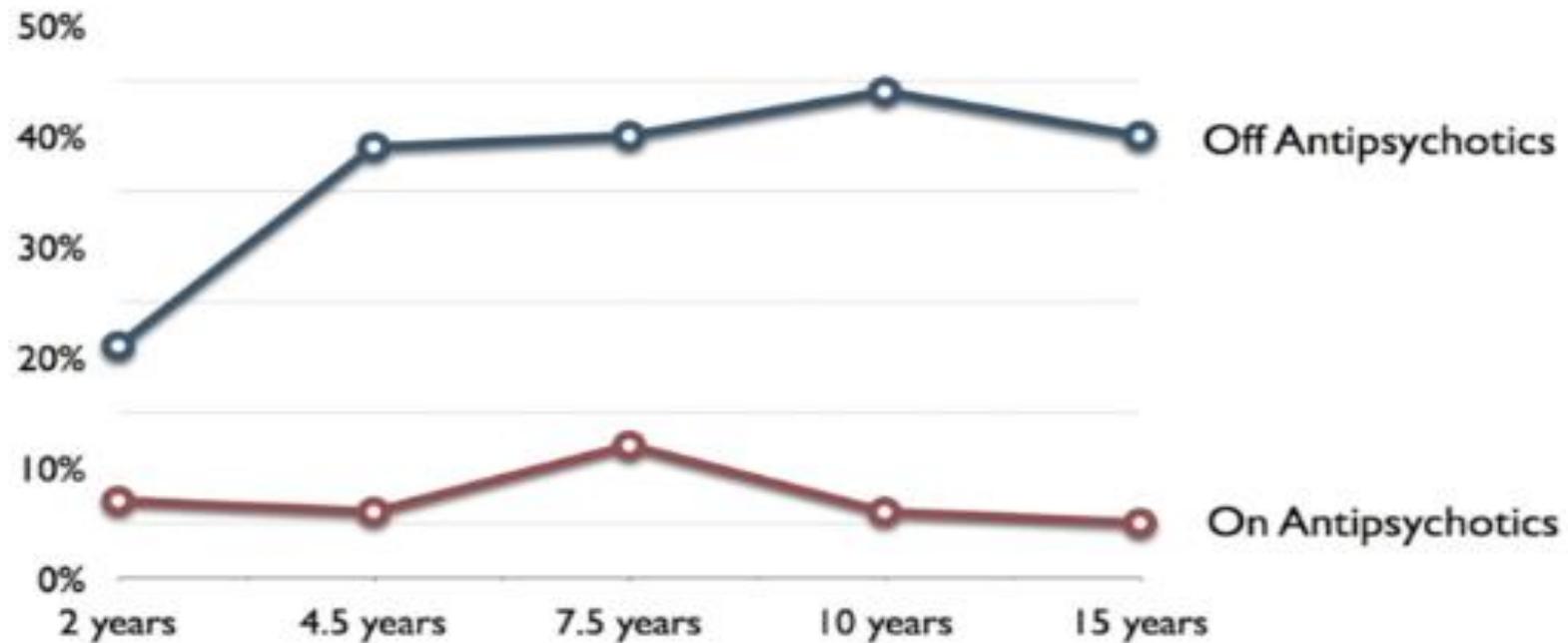
Source: Harrow M. "Does treatment of schizophrenia with antipsychotic medications eliminate or reduce psychosis?" *Psychological Medicine*, (2014);doi:10.1017/S0033291714000610

Anxiety Symptoms of Schizophrenia Patients



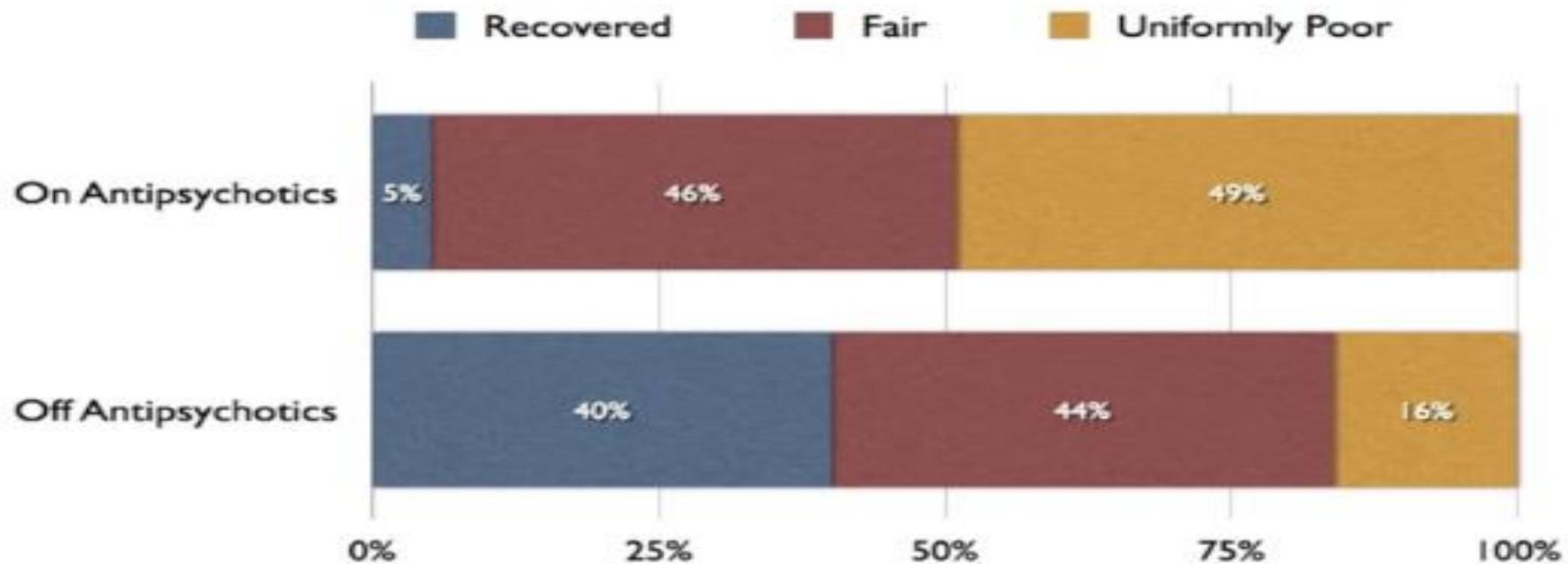
Source: Harrow M. "Do all schizophrenia patients need antipsychotic treatment continuously throughout their lifetime? A 20-year longitudinal study." *Psychological Medicine*, (2012): 1-11.

Long-term Recovery Rates for Schizophrenia Patients



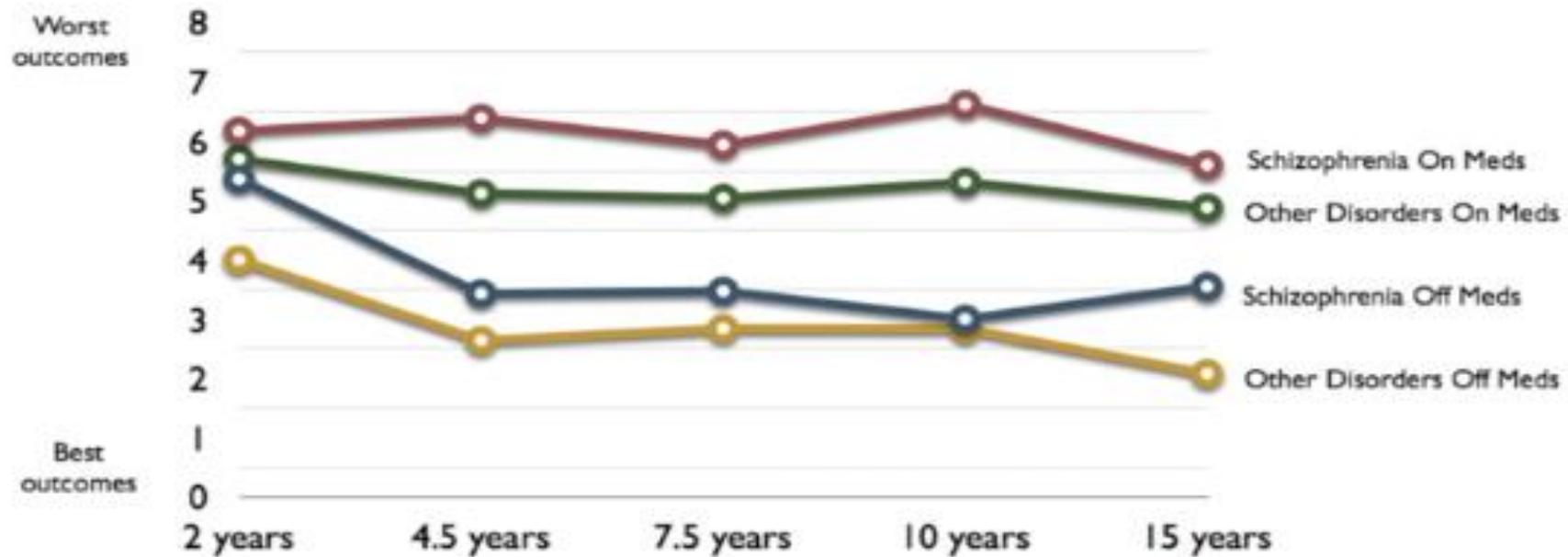
Source: Harrow M. "Factors involved in outcome and recovery in schizophrenia patients not on antipsychotic medications." *Journal of Nervous and Mental Disease* 195 (2007):406-14.

Spectrum of Outcomes in Harrow's Study



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.

Global Adjustment of All Psychotic 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.

“How unique among medical treatments is it that the apparent efficacy of antipsychotics could diminish over time or become ineffective or harmful? There are many examples for other medications of similar long-term effects, with this often occurring as the body readjusts, biologically, to the medications.”

--Martin Harrow, 2013

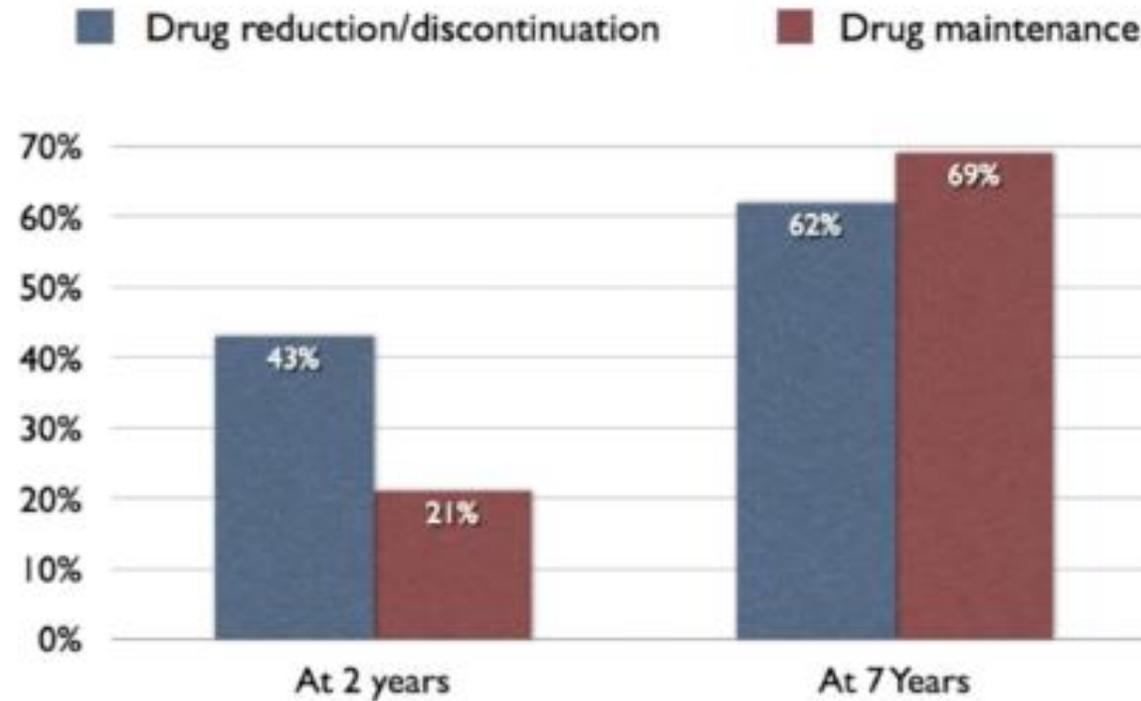
Lex Wunderink's Randomized Study of Long-term Outcomes

Study Design

- 128 stabilized first-episode psychotic patients who had been stable for six months on antipsychotics. (103 patients were still in the study at the end of seven years.)
- Randomized either to a dose reduction/discontinuation treatment, or to standard antipsychotic treatment.

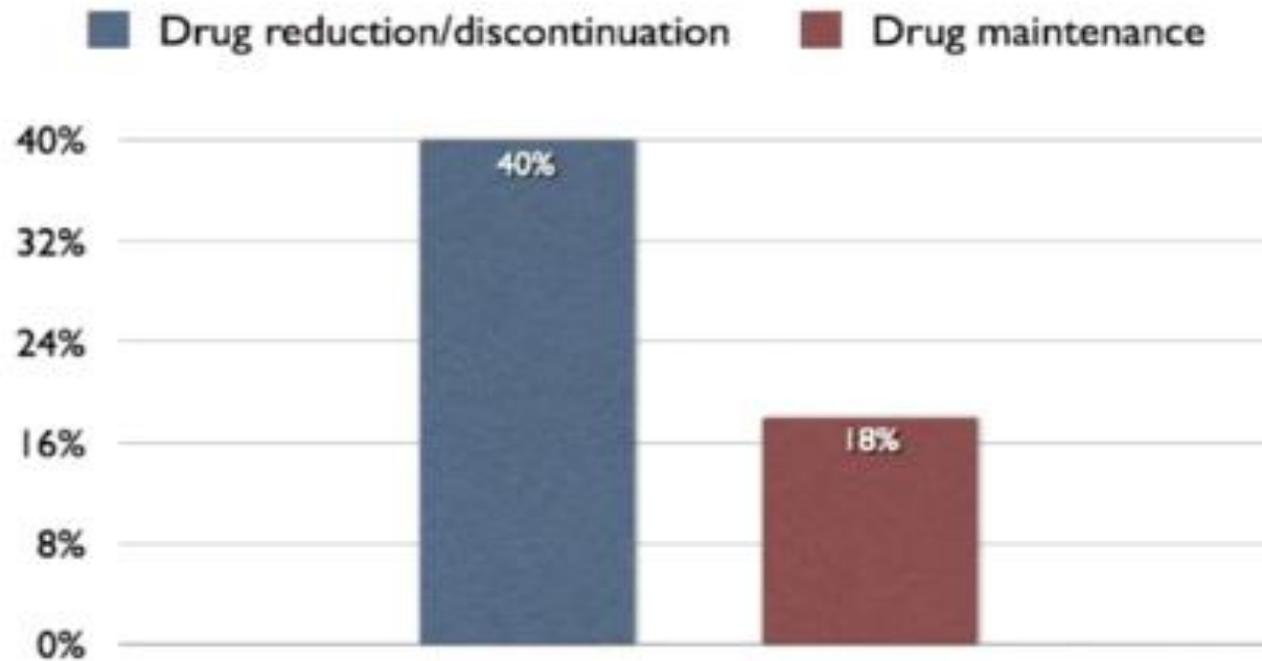
L.Wunderink. "Recovery in remitted first-episode psychosis at 7 years of follow-up of an early dose reduction/discontinuation of maintenance treatment strategy." *JAMA Psychiatry*, published online, July 3, 2013.

Relapse Rates

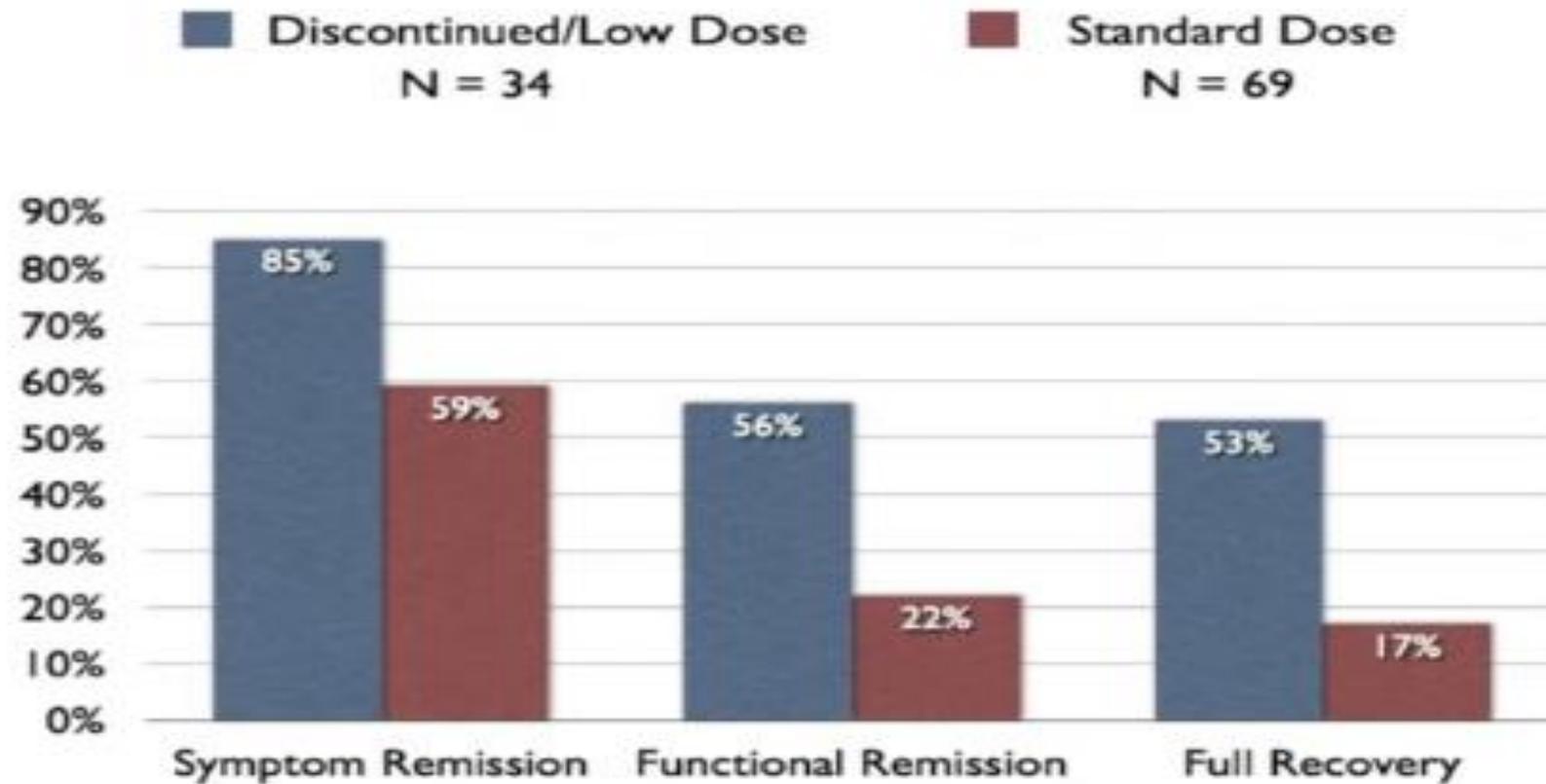


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Long-Term Recovery Rates (at 7 Years)



Outcomes By Antipsychotic Use



Wunderink's Conclusions

1. *Antipsychotics may worsen functional outcomes:*

“Antipsychotic postsynaptic blockade of the dopamine signaling system, particularly of the mesocortical and mesolimbic tracts, not only might prevent and redress psychotic derangements but also might compromise important mental functions, such as alertness, curiosity, drive, and activity levels, and aspects of executive functional capacity to some extent.”

2. The previous methods to assess outcomes were flawed:

“The results of this study lead to the following conclusions: schizophrenia treatment strategy trials should include recovery or functional remission rates as their primary outcome and should also include long-term follow-up for more than 2 years, even up to 7 years or longer. In the present study, short-term drawbacks, such as higher relapse rates, were leveled out in the long term, and benefits that were not evident in short-term evaluation, such as functional gains, only appeared in long-term monitoring.”

Australian Study of Effects of Medication Compliance on Outcomes

- 81 first episode patients
- 41 randomized to specialized relapse prevention therapy expected to increase medication compliance
- Specialized therapy did increase medication compliance over 30 months
- However, increase in medication adherence associated with “decreases in psychosocial functioning and increases in negative symptoms.”

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The Evidence Since 1980

| | |
|--------------------------------|-----------------------------|
| Cross-cultural studies | Negative for antipsychotics |
| Animal-modeling studies | Negative for antipsychotics |
| MRI Findings | Negative for antipsychotics |
| Prospective longitudinal study | Negative for antipsychotics |
| Randomized study | Negative for antipsychotics |
| Drug-compliance study | Negative for antipsychotics |

Conclusion:

“This is consistent with previous research showing an association between better vocational functioning at 2-year followup and placebo treatment compared with antipsychotic medication in a first-episode schizophrenia sample.”

J. Gleason. "A randomized controlled trial of relapse prevention therapy for first-episode psychosis patients." *Schizophrenia Bulletin* 39 (2013):436-48.

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The “Chemical Imbalance” Paradox

- Investigators have not found that a characteristic “chemical imbalance” is the biological cause of any major mental disorder.
- Investigators have found that psychiatric drugs induce compensatory changes in the brain that create a “chemical imbalance” in the brain, and of the type hypothesized to cause the mental disorder in the first place.

A Paradigm for Understanding Psychotropic Drugs

Stephen Hyman, former director of the NIMH, 1996:

- Psychiatric medications “create perturbations in neurotransmitter functions.”
- In response, the brain goes through a series of compensatory adaptations in order “to maintain their equilibrium in the face of alterations in the environment or changes in the internal milieu.”
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Recognition that the Evidence Base For Long-term Use of Antipsychotics is Lacking

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And:

“If we wish to base psychiatry on evidence-based medicine, we run a genuine risk in taking a close look at what has long been considered fact.”

--Emmanuel Stip, *European Psychiatry* (2002)

Thomas Insel, Director of NIMH

August 28, 2013

Commenting on the Wunderink and Harrow studies:

“What does this say about the long-term use of antipsychotics? Are they potentially harmful? Are they necessary for an individual’s entire lifetime?” . . . We need to ask whether in the long-term, some individuals with a history of psychosis may do better off medication.”



Dr. Joanna Moncrieff weighs in on the issue of antidepressant dogma

► [Joanna Moncrieff, MD](#), is Professor of Critical and Social Psychiatry at University College London and works as a consultant in community psychiatry in London. She has researched and written about theories of drug action, drug efficacy, the subjective experience of taking psychiatric drugs; decision-making; the history of drug treatment; and the history, politics, and philosophy of psychiatry more generally. She is currently leading a UK government-funded study of antipsychotic reduction and discontinuation, called the [RADAR study](#) (Research into Antipsychotic Discontinuation and Reduction). She is one of the founders and the co-chairperson of the Critical Psychiatry Network. She has authored numerous papers and several books including [The Myth of the Chemical Cure](#) (Palgrave Macmillan, 2008); [The Bitterest Pills: The Troubling Story of Antipsychotic Drugs](#) (Palgrave Macmillan, 2013); and [A Straight-Talking Introduction to Psychiatric Drugs](#) (PCCS Publishers, 2013).

Dr. Joanna Moncrieff weighs in on the issue of antidepressant dogma

► Website: <https://joannamoncrieff.com/about/>

The following slides are largely from Dr. Moncrieff's excellent YouTube videos:

https://www.youtube.com/watch?v=lwFQVaN_LIY

https://www.youtube.com/watch?v=sFpwlpTQR1U&list=PL33d9mT_Z9TICjEz44827dF3KTe5-Dltr

https://www.youtube.com/watch?v=IV1S5zw096U&list=PL33d9mT_Z9TICjEz44827dF3KTe5-Dltr&index=2

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The Myth of the Chemical Cure
A Critique of Psychiatric Drug Treatment
Joanna Moncrieff



Early Treatments for Psychosis

1920s

- Malarial therapy for syphilis introduced

1930s and 1940s

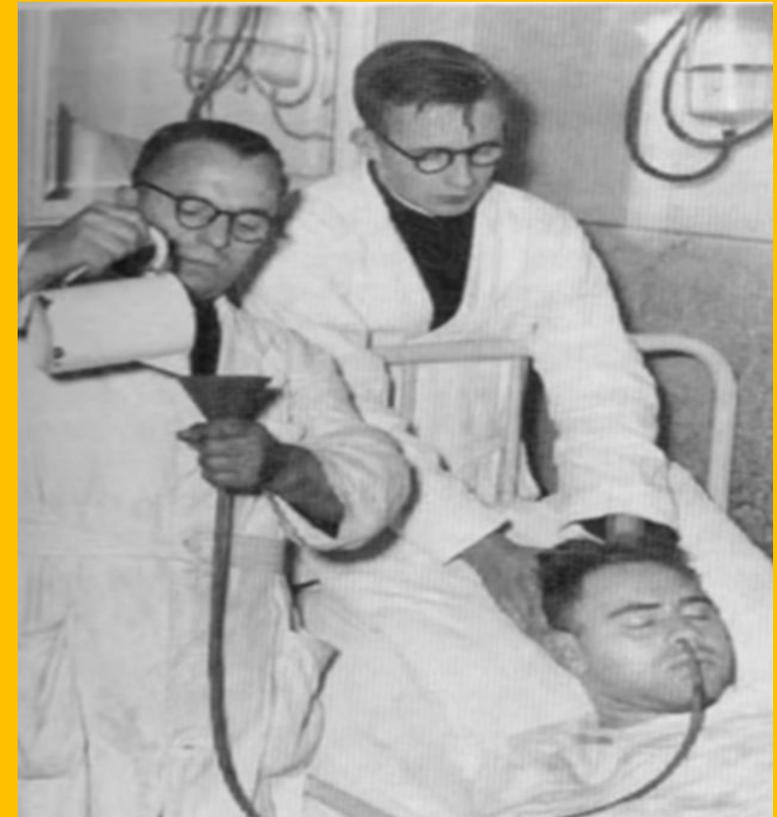
- Insulin coma therapy
- Chemically induced convulsive therapy
- ECT
- Lobotomy

Early Treatment for Psychosis: Insulin Induced Coma

Insulin coma therapy

“the introduction of insulin coma treatment was from a historical point of view the **decisive step from a purely symptomatic to a curative therapy** of the endogenous psychoses.”

Ehrhardt, 1966



Early
Treatment for
Psychosis:
Electro-
Schock



Changes in Therapeutic Concepts

Pre 1950s:

- Sedatives
- Stimulants

Post 1950s:

- Antipsychotics
- Antidepressants
- Anxiolytics
- Mood stabilisers
- Hypnotics

IN MILD PSYCHOGENIC DEPRESSIVE STATES . . .

this
IN MINUTES!

. . . WITH

RAPHETAMINE PHOSPHATE

Brand of Rapphettamine Phosphate

• Research has shown Rapphettamine Phosphate will be necessary to control depression, irritability and apathy in mild psychogenic depressive states . . . and in the management of chronic.

With raphettamine chloride (Sedril) as a stimulant, cardiac actions, and hyperactivity in epinephrine-like compounds, Rapphettamine may be prolonged.

Nowly accepted parenteral Rapphettamine Phosphate can successfully be used in treating the chronic depressive features of the neurotic state.

Clinical supply of bulk drug forms available on request. Write to Medical Service Department, K.J. Strassenburgh Co., Rochester 14, N. Y.



Strassenburgh
Rochester 14, N. Y.



CHEERFULNESS

MENTAL
ALERTNESS

OPTIMISM



INDICATION: Rapphettamine Phosphate parenteral solution (10 mg. raphettamine chloride and epinephrine hydrochloride) is indicated in the treatment of mild psychogenic depressive states.



Tablet: Rapphettamine Phosphate tablets containing 5 mg. raphettamine parenteral equivalent phosphate per tablet are available in bottles of 100, 500 and 1000.



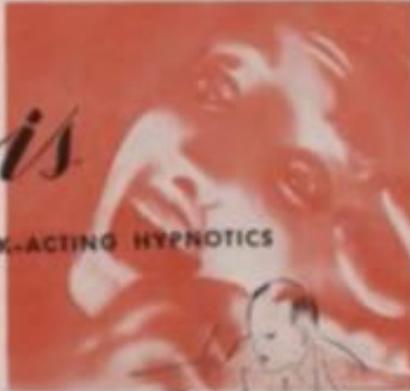
ETW&J

4

WHEN

Crisis

DEMANDS QUICK-ACTING HYPNOTICS



All solutions are equal
in solution.

PENTOBARBITAL LIQUOR
and Benzyl Alcohol

25 grs. in 7 cc. Benzyl Solution
2 grs. in 2 cc. Benzyl Solution

PHENOBARBITAL LIQUOR
and Benzyl Alcohol

25 grs. in 7 cc. Benzyl Solution
2 grs. in 2 cc. Benzyl Solution

For information see
LAKESIDE 100

In crisis when immediate response is imperative, Pentobarbital* and Phenobarbital* Liquors have been found to be quick-acting hypnotics. And they have the advantage of being water solutions, ready for instant use ... an emergency or saving required.

Propylene Glycol, the solvent used in these solutions, is completely miscible in water and diffuses rapidly to penetrate tissue with the result that the medication acts essentially as though it were in aqueous solution. Yet these solutions contain nothing but pure barbiturate and benzene. Benzyl alcohol is added as a local anesthetic. Lakeside Laboratories, Milwaukee, Wisconsin.

*Pentobarbital
Liquor and Benzyl Alcohol



*Phenobarbital
Liquor and Benzyl Alcohol

LAKESIDE

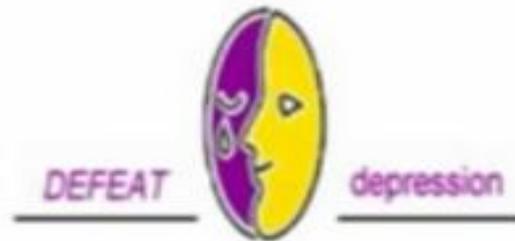
Psychiatric treatment in early 20th century

- Mostly regarded as non specific
- Emphasis on fresh air and a healthy environment
- Experimentation with physical interventions: surgery, “hydrotherapy”



A new approach to use of drugs for mental health problems

Disease centred model-
assumes benefit



Drug centred model-
assumes harm



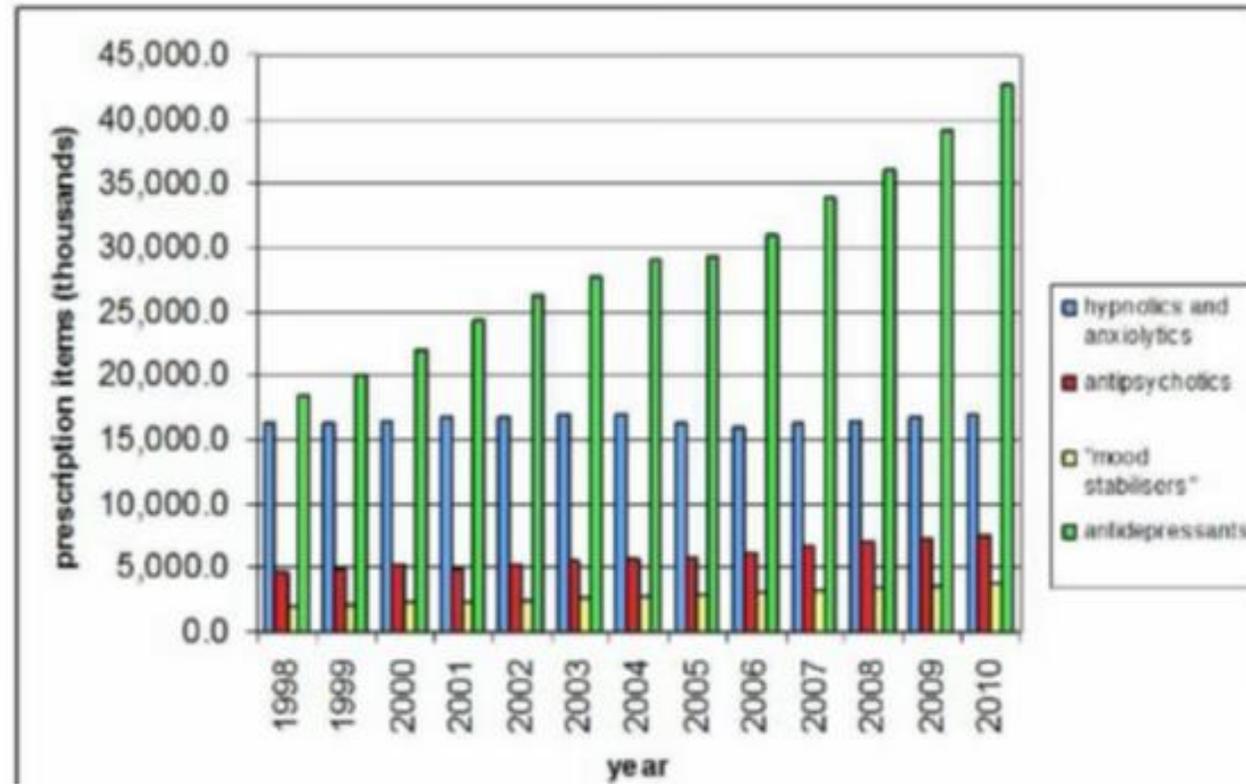
Models of drug action

| Disease centred model | Drug centred model |
|--|--|
| Drugs correct an abnormal brain state | Drugs create an abnormal brain state |
| Drugs as disease treatments | Psychiatric drugs as <i>psychoactive drugs</i> |
| Therapeutic effects derived from effects on (presumed) disease pathology | Useful effects are a consequence of the drug induced state |
| Paradigm: insulin for diabetes | Paradigm: alcohol for social anxiety |

Current trends

- Early intervention in psychosis
- Expansion of bipolar disorder
- Un-licenced prescribing by GPs and in nursing homes
- 67% atypical antipsychotics prescribed for people without psychosis or schizophrenia (US National Ambulatory Medical Care Survey, Sankaranarayanan&Puumala, 2007)

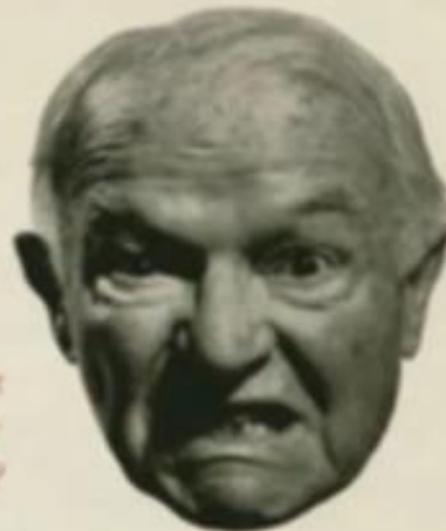
Trends in prescriptions in England 1998-2010



Castle, 2012

- WHO estimate: 14 new cases of psychosis per 100,000
- Cambridge (England) Early Intervention service 50 per 100,000
- Melbourne (Australia) Early psychosis programme approx 100 per 100,000

*Tyrant
in the
house?*



"Thorazine" can control the agitated, delirious senile

and help the patient to live a composed and useful life.

When "Thorazine" is administered to the agitated senile, there is a marked decrease in the over-riding influence of hostility, irritability, aggressiveness, excessive talking and "top-and-bottom" pecking at weaknesses.

On "Thorazine" therapy, the patient often finds more regular eating and sleeping habits and improves in his general hygiene. As the patient becomes more peaceful and cooperative, he is able to live a composed and useful life.

THORAZINE*
CHLORPROMAZINE HCL

one of the fundamental drugs in medicine

Smith Kline & French Laboratories, Philadelphia

© 1964 S.K.F. Co.

www.decodog.com

Evidence for disease-centred model of drug action

- Placebo controlled trials do not demonstrate disease-centred effects

But disease-centred model might be supported if:

- We knew the disease mechanism
- Impact of psychoactive effects can be discounted
- 'Specific' drugs were consistently better than non specific ones, given equivalent psychoactive effects

We do not know the mechanism of any mental disorder

- We have **hypotheses** like dopamine hypothesis of schizophrenia and serotonin or noradrenalin hypothesis of depression
- Hypotheses are derived from drug action
- No conclusive independent evidence for them

Using drugs in a drug-centred manner

Need to know full range of:

- Mental effects
- Physical effects
- Short-term effects
- Long-term effects
- Withdrawal effects

Drug-induced effects of 'antipsychotics'



Comments from 'askapatient.com'

- *Mental and physical stagnance*
- *Emotionally empty, dead inside*
- *A weird spacey empty feeling*
- *Constant fog of lethargy and indifference (olanzapine)*

From askapatient.com

- “Although I felt very well, I felt as if I had absolutely nothing to talk about. I kept wondering about whatever [it] was that had been so interesting during most of my life that I had suddenly lost... But I was very much in contact with reality and for that I was thankful” (haloperidol)

Psychoactive drugs

- Produce altered mental and physical states
- Produce tolerance and withdrawal effects
- “spell binding” (Breggin, 2007)

Treatment of psychosis

- Antipsychotics may reduce intensity of psychotic phenomena and associated distress
- Reduce behavioural disturbance
- Long-term use: benefits may not outweigh adverse effects
- Other sedative drugs may be useful (and less harmful and unpleasant)
- Most people recover from psychosis (at least temporarily) without drug treatment

SZASZ, T. S. 1957, "Some observations on the use of tranquilizing drugs", *AMA.Arch.Neurol.Psychiatry*, vol. 77, no. 1, pp. 86-92

- 'Chemical strait-jackets'
- 'Restraint by chemical means does not make us guilty; herein lies the danger to the patient'

- 'antipsychotic medicines are believed to work by balancing the chemicals found *naturally* in the brain'

Eli Lilly, zyprexa.com, 2011



PIER programme, Portland, Maine
'the symptoms are easy to spot if you know what to
look for'



Are 'antipsychotics' superior to other sorts of sedatives?

Yes sometimes, but not always

- **Barbiturates:** 2 early studies showed chlorpromazine superior
- **Benzodiazepines:** 6 trials: 3 trials AP=BZD; 2 trials BZD>AP; 1 trial CPZ>BZD=HAL
- **Lithium:** equal in moderately active cases, inferior in overactive cases (Braden et al, 1980).
- **Opium:** 1 old study found opium equal to chlorpromazine for acute psychosis

Dr. Joanna
Moncrieff
concludes:

Are 'antipsychotics' superior to other sorts of sedatives?

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A Call to Rethink Antipsychotics

“It is time to reappraise the assumption that antipsychotics must always be the first line of treatment for people with psychosis. This is not a wild cry from the distant outback, but a considered opinion by influential researchers . . . [there is] an increasing body of evidence that the adverse effects of [antipsychotic] treatment are, to put it simply, not worth the candle.”

--Peter Tyrer, Editor
British Journal of Psychiatry, August 2012



CONCLUSION!

In Conclusion

► To restate my opening comment, I am not recommending that you or your child take or not take any medication. Rather, I suggest that you apprise yourself of the outcome research as best you can before you take any psychotropic medication. Empower yourself to ask your prescriber about any concerns you might have to include the content of this PowerPoint. Robert Whitaker and Dr. Joanna Moncrieff have done us a great service in offering the other side of medication dogma regarding antipsychotics and I believe that we owe them much gratitude for their courage in challenging us on the need for thoughtful consideration before we embark down the medication highway.