## Separating Science from Promotion Evidence from Propaganda

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World Conference of Science Journalists London July 2, 2009 A body of evidence contained in pharmaceutical company documents, mostly uncovered during civil and criminal legal proceedings, leaves little doubt, but that Pharma has fully earned its plummeting reputation.

Merck—Vioxx Eli Lilly— Zyprexa Janssen (J & J)--Risperdal GlaxoSmithKline—Paxil / Paroxetine Pfizer—Neurontin—Trovan—Celebrex—Bextra

### Propaganda:

The pharma industry promotes itself as dedicated to bringing "life-saving" medicines to patients through "innovative research and development."

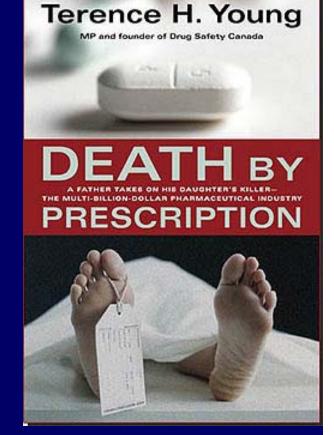
## Evidence:

Pharma is driven by commercial expediency: promoting drugs of dubious benefit and serious undisclosed risks as "safe and effective." Patients suffer catastrophic harm. Adverse drug reactions: 4th leading cause of death in the U.S.

Each year:

1.5 Million Americans are hospitalized due to ADR
106,000 hospitalized pts die of ADR

JAMA, 1998



## Serious ADR reported to FDA MedWatch:

- 1998: ADR: 34,966; Deaths: 5,519
- 2005: ADR: 89,842; Deaths: 15,107

Archives Internal Med, 200

Most drug-induced deaths reported to the FDA were linked to pain killers (opiates and analgesics) and Atypical antipsychotics.

1998 – 2005: the deaths of 6,225 Americans were linked to Zyprexa, Risperdal, Clozaril.

Archives of Internal Medicine, 2007

Drug safety problems are due to inadequate testing and false marketing claims widely misrepresented as "science-based evidence."

Pharma funds 80% of clinical trials turning science into a marketing tool designed to create an illusion: "safe and effective."

Underpowered, minimal duration; clinically insignificant end points; cherry picked subjects; unreported injured dropouts; negative data buried, unpublished. Placebo is industry's EasyPass "...without placebo-controlled trials, industry would be forced to find better drugs rather than just more drugs."

"Why risk trying to prove you're better than something, when all you need to show is that you're better than nothing?" Robert Misbin, MD, FDA, Div. Endocrinology, 2001

"4 of every 28 new drugs are clinically superior—and 1 is also safe."

Dr. Donald Light, Facts & Myths About Drug Development, 2007

Clinically insignificant, toxic drugs become blockbuster sellers. Worst drugs are the most advertised Merck: Fosamax, Vioxx Pfizer: Neurontin, Bextra, Zoloft, Chantix, Geodon GlaxoSmithKline: Paxil, Avandia Lilly: Oraflex, Prozac, Cymbalta, Zyprexa Janssen (J & J): Prepulsid, Risperdal AstraZeneca: Seroquel Wyeth: Prempro, Redux (Fen-Phen)

# Vioxx: just another pain pill with no therapeutic benefit.

Estimated 130,000 to 953,000 cardiac events

Donald Light, Institutional Foundations of Drug Disasters, 2008

55,000 estimated deaths

David Graham, FDA Whistleblower

 Merck Propaganda (2004) "really putting patient safety first..."

 Evidence: 3-fold increased risk of death. Merck knew (2000) cardiac risk
 *"is mechanism-based, as we worried it was..."* Edward Scolnick, chief scientist, Merck, 2000 "Drug disasters are literally built into the current system of drug testing and approvals... We are virtually defenseless against another Vioxx."

Dr. David Graham, Senate Testimony, 2004

"New drugs are twice as likely to cause harm compared to existing treatment." Dr. Donald Light, Inst Foundations of Drug Disasters, 2008

 How were hazardous drugs turned into high profit best sellers?

## "Cost of Pushing Pills"

Gagnon, Lexchin, PLoS Medicine, 2008

#### Annual Expenditures:

- Marketing (promotion) \$57.5 billion

   Influencing doctors (detailing) \$20.4 billion

   Research & Development \$31.5 billion
  - Additional marketing expenditure: ghostwritten reports, fake journals lobbying, illegal off-label promotion
- 2004 U.S. Pharma Sales

\$235.4 billion

# Pharma's pervasive influence has undermined prof / scientific integrity.

- -Medical research / clinical trials
- -Journals, scientific meetings
- -Medical education / Grand rounds, CME
- -Practice guidelines
- -FDA review / approval process
- -Public health policy
- Media mostly transcribe marketing hype as "scientific breakthroughs"

"drug companies will do everything in their power to keep a drug on the market, especially their top money-makers."

Terence Young, MP Canada, "Death by Prescription, 2009

Pharma has paid hundreds of millions even billions of dollars in secret liability settlements —to hide evidence.

But some secrets have come unsealed...

### Unsealed secret company documents

• Lilly run a large and highly effective IIT program

• Significantly higher (x3 in some markets) investment than AZ

• They are perceived as open and flexible to receiving proposals but will often impose strict design changes before approval

• They impose few restrictions on the investigator once design changes are communicated and agreed

• They are fast and effective in turning studies around centrally and locally

• They offer significant financial support but want control of the data in return

 $\boldsymbol{\cdot}$  They are able to spin the same data in many different ways through an effective

publications team

- Negative data usually remains well hidden
- Janssen have a well organised IIT plan



• Significant spend in some markets but variable in others

• Well structured, protocol-driven program that turns proposals around quickly through a very small approval team

• Local investment decisions are allowed on small IIT's

• No IIT data is allowed to be published without going through Janssen for approval, and communication is controlled by Janssen

• High expectations are set on investigators who publish favorable results but they are well rewarded for their involvement

• They seem less concerned than Lilly about negative data reaching the public domain

• BMS IIT program is growing very fast in launched markets

AstraZeneca unsealed Seroquel document, 2003

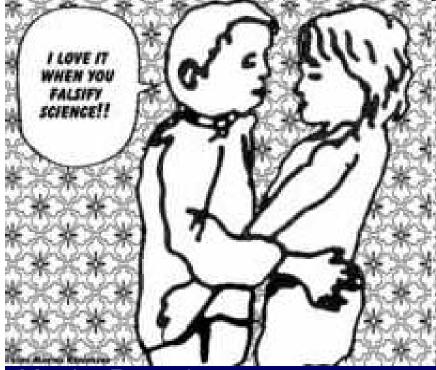
AstraZeneca documents reveal: Seroquel's safety was promoted with "positive spin...smoke-and-mirrors." (1997)

But three Seroquel trials that showed a serious diabetes risk were buried.

"Our objective is to neutralize customer objections to Seroquel's weight and diabetes profile." (2005) Wall Street Journal, 2009

"drug companies will do everything..."

# AstraZeneca: U.S. Medical Director used Sex to control Seroquel reports



Dr. Wayne Macfadden (now at J & J) acknowledged in sworn testimony... sexual relationships with several women who ghosted favorable Seroquel journal articles.

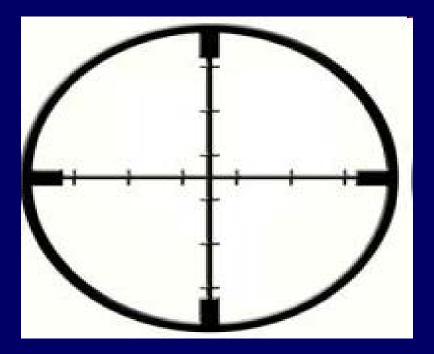
Martha Rosenberg, 2009

One woman was a researcher at the Institute of Psychiatry, King's College, London. Businessweek, 2009 How industry tactics hide negative antipsychotic data.

- Lilly "spin the same data in many different ways through an effective publications team. Negative data usually remain well hidden."
- BristolMeyerSquibb "Strategic focus is on unlicensed indications."
- J & J "no data is allowed to be published without Janssen approval…investigators who publish favorable results are well rewarded." AZ Global Manager email, 2003

## Merck: Doctor Hit List

"Neutralize" "Discredit" "Destroy"



"We may need to seek them out and destroy them where they live ...."

Australian News, 2009

Commercial expediency trumps Ethics, Science, Safety

- Pharma Corporate Ethics
  - Exploitation, false claims
- COI → Corrupted Science / Medicine

 biased trials, data manipulation, ghosted reports, fake journals, manufactured consensus

Corporate Crimes → Drug Disasters
 —fraud, deception, concealed hazards, illegal

promotion, threats / intimidation of critics

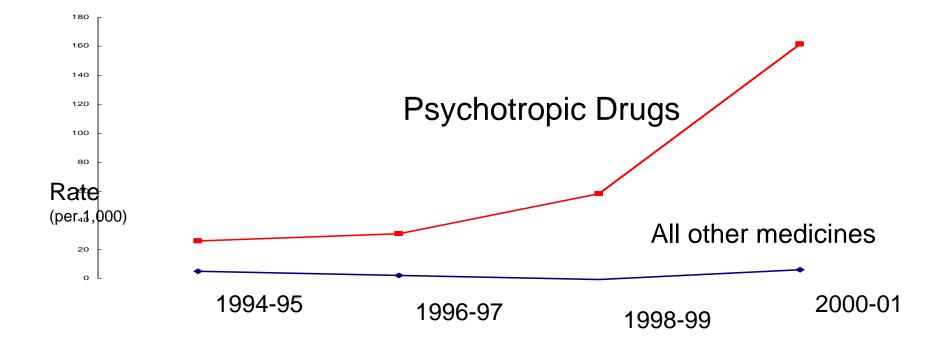
Archive of drug industry documents, U of California, SF

## Big Tobacco ~ Big Pharma

- Both marketed harm-producing products.
- Both engaged in corrupt corporate practices.
- Both concealed hazards & launched deceptive marketing / advert campaigns.
   Important differences:
- Doctors did not prescribe cigarettes

   promote tobacco or shield from liability
   rely on tobacco for safety information
- Medical journals were not conduits for ghosted tobacco industry propaganda.

## **Prescription for Disaster** U.S. Rx Trends for Adolescents



Used mostly for behavior control Psych Services, 2006 Birth of pediatric market: contrived disease rationale promotes antipsychotic use.

1994: Janssen (J & J) launched the antipsychotic, Risperdal.



1994: Psychiatry's Diagnostic Manual (DSM) broadly redefined pediatric bipolar disorder.

1996-2004: "Bipolar" children increased 439% Blader, Carlson, *Biological Psychiatry 2007* 

#### Propaganda:

Leading journal reports signed by prominent academics claimed:

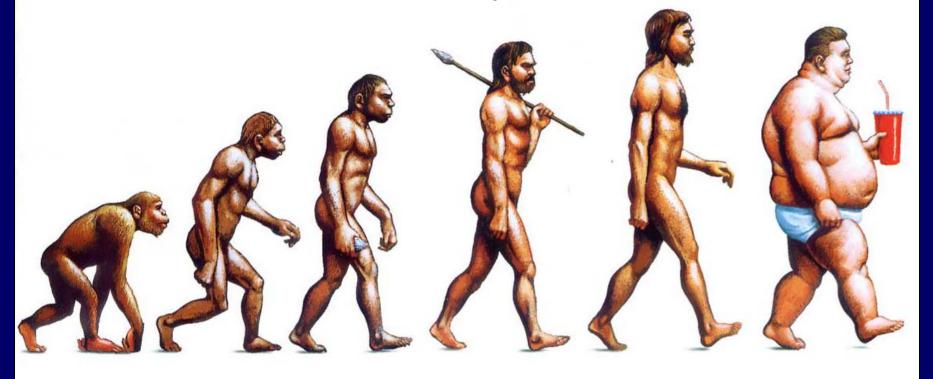
"Atypical antipsychotics are safe & effective...well tolerated...with a more favorable side-effect profile."

J Clinical Psychopharmacology, 1999 Primary Care J Clinical Psychiatry, 2003

They were silent about these drugs' staggering adverse effects and potentially lethal risks.

### Clozaril – Risperdal – Zyprexa — Seroquel – Abilify-Geodon

#### **Evolution of Metabolic syndrome**



#### No evidence the drugs help patients recover

## "Safe and effective?"

Severe adverse drug effects: acute weight gain, <u>diabetes</u> mellitus, elevated prolactin—pituitary tumors <u>Metabolic Syndrome</u>

Dangerously abnormal: liver function, cholesterol level, hyperglycemia, coronary heart disease—DEATH

Impair judgment, motor skills; sexual function

The new antipsychotics = worse than the old...

Risperdal linked to <u>Gynecomastia</u> In 8-week clinical trials (2.3%) 43 children / adolescents on Risperdal grew breasts.



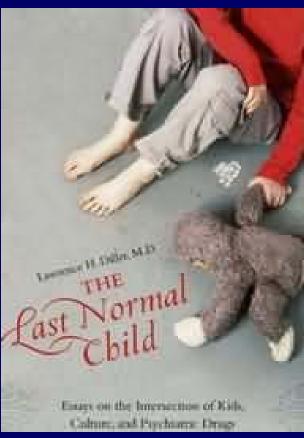
Boy Rx Risperdal required double mastectomy at age 13.

70% of pediatric post-marketing gynecomastia cases linked to Risperdal. Doraiswamy, Pharmacotherapy, 2006

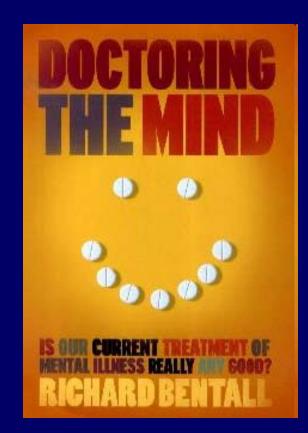
## Despite staggering adverse effects...

"nearly 1 in 5 psychiatric visits for children included a Rx for antipsychotics."

Dr. Mark Olfson, Arch Gen Psych, 2006



"Drug companies are bribing American child psychiatrists with huge research grants to advocate [antipsychotic] treatment... to poison children...and it's beginning to happen in the UK."



Antipsychotic Use in Canadian Children: Up 1,000%

- "University of British Columbia medical research suggests:
- "the number of children taking atypical antipsychotics has increased tenfold over the past decade."
- "The drugs can have potentially serious sideeffects, and are linked to increases in stroke and sudden death in adults."
- Health Canada has not approved atypical
   antipsychotics for children.
   CBS News, 2009

"Despite potential health consequences, the metabolic status of patients appears to have little bearing on clinicians' choices of an atypical antipsychotic agent."

Neil Osterweil, APA, 2007

2008 U.S. Antipsychotic sales: \$14.6 billion

Zyprexa \$4.7 Seroquel \$4.5 Risperdal \$2.5 Abilify \$2.1 *IMS, Associated Press, 2009* 





Public trust in the integrity of medicine and medical research will not be restored until:

 A firewall is erected to curtail (if not eliminate) industry influence.

2. Pharma executives are held fully accountable for illegal practices.