

Email Sent: Wednesday, January 30, 2008 12:42 PM
Subject: Latest Electroshock Propaganda--It's the "Penicillin of Psychiatry"

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The history of psychiatry is a story of megalomania. A confounding problem for psychiatry is the profession's failure to examine its therapeutics from patients' perspectives or to put psychiatry's therapeutics to a valid scientific test to determine whether the benefit outweighs the risks from patients' perspective.

Suppose someone told you about a treatment for depression that was more effective than anything else, virtually free of side effects, that is being promoted as "the Penicillin of Psychiatry"-would you believe it or would you be skeptical? This is what we are told in a new book, "Shock Therapy: A History of Electroconvulsive Treatment in Mental Illness" (2007) by Edward Shorter, PhD and David Healy, MD. To decide whether this book is describing a scientific breakthrough or merely more propaganda, we should consider some highlights from the contentious history of ECT.

Thomas Insel, MD director of the National Institute of Mental Health, recently acknowledged on public television that psychiatry's practices, unlike other fields of medicine, are governed by the personal preference--i.e., bias--of a psychiatrist: " the treatments that people are given depends not so much on a thorough understanding of mental disorders, [but] much more on what it is the therapist is most comfortable in doing." <http://www.pbs.org/wgbh/pages/frontline/medicatedchild/interviews/insel.html>

Indeed, history demonstrates that psychiatrists regularly prescribe invasive biological interventions--be they pharmacologic, magnetic, electric, or surgical--on the basis of conviction (faith) rather than evidence. Sixty years after its introduction, electroshock (ECS) a.k.a. electroconvulsive therapy (ECT), remains psychiatry's most controversial intervention. ECT is a polarizing symbol of authoritarianism that continues to be mired in both moral and professional controversy. Practitioners are locked in a bitter battle against patients who have been harmed and who are fighting for full disclosure. ECT's longevity--even as its adherents are fiercely divided over the dosage of electricity and method of application (bilateral vs. unilateral placement of electrodes) [1] confirms Dr. Insel's observation.

What ECT does to the brain is best described by neurologists who describe the measurable pathological changes that are recorded on the EEG, including

alterations in brain chemistry and physiology. Neuroscientist, Dr. Peter Sterling, University of Pennsylvania, provides a detailed description of what ECT does to the brain in testimony. [2]

<http://retina.anatomy.upenn.edu/pdffiles/Oct2002NYC.pdf>

1. The electric shock delivered by a standard ECS machine to the skull is roughly comparable to what you would get from a common electrical outlet, but the voltage is stepped up from 110 V to 150 V. The total power drawn is about 60 Watts -- enough for a conventional light bulb.
2. ECS is designed to evoke a grand mal epileptic seizure. The seizure causes an acute rise in blood pressure, well into the hypertensive range, and this frequently causes small hemorrhages in the brain.
3. ECS ruptures the "blood-brain barrier". This barrier normally protects the brain from potentially damaging substances in the blood.
4. ECS causes neurons to release large quantities of the excitatory neurotransmitter, glutamate, leading to "excito-toxicity" causing neurons literally die from overactivity.
5. ECS releases myriad other neurotransmitters and hormones within the brain. The degree of damage consequent to ECS varies between individuals. It can be catastrophic in response to a single series, or it can appear more gradually following repeated series. <http://retina.anatomy.upenn.edu/pdffiles/Oct2002NYC.pdf>

ECT Background:

ECT was originally promoted much as lobotomy had been-as an expedient, quick, easy, and cheap method of controlling mental patients' behavior.

Early on leading US practitioner / researchers acknowledged that ECT produces profound, lasting trauma. Lothar Kalinowsky, MD: "All intellectual functions, grasp as well as memory and critical faculty, are impaired." [2]

Abraham Myerson, MD: "The mechanism for improvement and recovery seems to be to knock out the brain and reduce the higher activities, to impair memory."

[3] Max Fink, MD, acknowledged in 1958 that a single ECT treatment is akin to "severe head trauma," suggesting that "convulsive therapy provides an excellent experimental method for studies of craniocerebral trauma." [4]

Despite its injurious effects on cognitive function and memory, ECT has outlasted the other three "brain-damaging-therapeutics"-insulin coma, Metrazol, and lobotomy. In part, because anesthesia was introduced to moderate the physical vertebrae and bone-breaking force of the convulsions that patients undergo during electrically induced Grand Mal seizures. However, as an authoritative systematic meta-analysis in Lancet (2003) reports, neither anesthesia nor other newer methods for applying ECT have resulted in an appreciable reduction in other adverse effects. [5]

Three other factors led to ECT's survival after its eclipse in the 1960s and 1970s:

1. Psychotropic drugs did not prove to be the claimed wonder drugs-they also

caused debilitating neurological side effects, and failed to improve patients' long-term outcome.

2. ECT economics, which Leonard Frank succinctly outlined: "ECT is a money-maker. An in-hospital ECT series can cost anywhere from \$50,000-75,000. Using a low figure of 100,000 Americans who are electroshocked annually, most of who are covered by private or government insurance, ECT brings in \$5 billion a year." [6] In the US especially, the promoters of ECT-- including academic-affiliated practitioner / researchers, device manufacturers, and hospitals-all have significant financial interests in ECT.

3. The zealous advocacy of its practitioner-proponents-all of whom have unacknowledged financial conflicts of interest. [7] ECT is dominated by a small vocal group of powerful "authority" figures who exert inordinate influence--indeed, control over ECT research, funding, publications and practice policies on the basis of their conviction--not scientific evidence. Although their financial stake in the business of ECT is rarely (if ever) mentioned in their professional academic contributions, no doubt money plays a role. Since ECT treatment approaches and outcome evaluations rely entirely on practitioners' own preference and assessment, their objectivity is highly questionable.

Foremost among ECT's influential proponents is Dr. Max Fink, a combative octogenarian who has been applying bilateral ECT longer than anyone. Dr. Fink wrote the first ECT textbook, and is credited with formulating the theoretical foundation, ethical justification, practice guidelines, and informed consent documents for ECT, actively contributing promotional material for commercial use. [8]

In September 1978, amidst a heated debate, the first ECT Task Force of the American Psychiatric Association surveyed the membership to find out whether they thought that ECT was brain damaging. The response by 41% of APA members affirmed the likelihood that: "ECT produces subtle or slight brain damage"--only 26% said no. [9] The Task Force report outlined the ECT research agenda to address patients' complaints of memory loss. No such research was carried out.

In 1979 the FDA classified shock machines as a Class III medical device--indicating it had not been proven safe and effective. Despite continuing controversy, ECT machines have never been put the test in controlled trials because manufacturers and ECT practitioners were adamantly opposed. The question is, WHY?

If ECT does not cause cognitive damage and memory loss, why have its proponents failed to conduct a test that will prove them right?

The reason behind ECT practitioners' fierce opposition to performing controlled clinical trials may be found in a 1978 article by Max Fink in the official journal of the Psychopathological Association:

"The principle complications of EST [ECT] are death, brain damage, memory impairment, and spontaneous seizures. These complications are similar to head trauma to which EST has been compared." [10]

Indeed, a cumulative body of evidence confirmed ECT's brain damaging effects. [11]

Ardent ECT promoters regularly go to battle when threatened with restricted use:

By 1983, 26 states had passed statutes restricting ECT and 6 others established regulations. In 1985, the National Institutes of Health (NIH) issued a Consensus Statement confirming: "It is [] well established that ECT produces memory deficits. Deficits in memory function, which have been demonstrated objectively and repeatedly, persist after the termination of a normal course of ECT." [12] Threatened with restrictions, ECT's torchbearers began a propaganda campaign, vehemently denying evidence of lasting memory loss, while resolutely avoiding an examination of the impact of ECT on memory and cognition

Dr. Fink's pronouncements border on missionary zeal, if not megalomania.

In 1983, he declared: "If there is no SUBSTANTIAL evidence of brain impairment, then there is NO evidence for brain impairment." [13]

In 1996, he stated: "ECT is one of God's gifts to mankind. There is nothing like it, nothing equal to it in efficacy or safety in all of psychiatry."

[14]

He pronounced ECT an "effective treatment of patients with major depression, delusional depression, bipolar disorder, schizophrenia, catatonia, neuroleptic malignant syndrome, and parkinsonism.. No age or systemic condition bars its use." [15]

"Adverse effects on memory have been minimized to the point of being undetectable, by any means of assessment, six weeks after completion of treatment." [16]

In 2002, Dr. Fink promoted the use of ECT for children, disregarding the profound harm that he himself had documented but now vehemently denies:

"Until demonstrations of untoward consequences are recorded, we should not deny the possible benefits of biological treatments to children on the prejudice that these treatments affect brain functions." [17]

Shock Waives in the Shock Community:

In 2000, the tightly knit ECT cottage industry was confronted with the most serious challenge to their vehement public denials that persistent memory

loss is a risk of ECT. The central supporting stone was pulled from ECT's house of clay by Harold Sackeim, Ph.D., an equally prominent ECT advocate arguably the most prolific ECT researcher. In an astonishingly candid editorial in the Journal of ECT, he explicitly validated patients' claims, acknowledging that consistent evidence exists documenting that:

"virtually all patients experience some degree of persistent and likely permanent amnesia. It has also become clear that for rare patients the retrograde amnesia due to ECT can be profound, with the memory loss extending back years prior to receipt of the treatment." [18]

Sackeim further conceded that ECT causes frontal lobe damage significantly affecting the brain's executive functions: including working memory, logical reasoning and abstraction, problem solving, planning and organizing.

Dr. Sackeim, who simultaneously headed the ECT divisions at Columbia University and New York Cornell, was the recipient of tens of millions of dollars in NIMH research grants collecting data on its effects for two decades. He was, therefore, in possession of evidence demonstrating that the profession's failure to provide evidence of cognitive harm and memory loss is not evidence that none exists. "As a field, we have more readily acknowledged the possibility of death due to ECT than the possibility of profound memory loss, despite the fact that adverse effects on cognition are by far ECT's most common side effects." [18] [AHRP seeks an electronic copy of Dr. Sackeim's editorial] In 2001, Sackeim and his Columbia University colleagues reported in JAMA an 84% relapse rate, six months after ECT. [19] Seven years after his editorial (2007), he and colleagues published the data substantiating his editorial. [20]

"Shock Therapy: A History of Electroconvulsive Treatment in Mental Illness" (2007) by Edward Shorter, PhD and David Healy, MD, is not so much a history of electroconvulsive therapy (ECT) as it is an unreserved endorsement and tribute to Max Fink. Oddly, although he is not a named author, Dr. Fink states on his website that he is "now working on a book on a History of Convulsive Therapy with Edward Shorter and David Healy."

http://www.hsc.stonybrook.edu/som/psychiatry/fink_m.cfm

Whatever... The book is clearly written at the behest of Dr. Fink-whose private foundation, Scion Natural Science Association, provided a \$34,900 grant. <http://dfcm.utoronto.ca/research/pdf/grants.pdf>

The book serves to bolster Dr. Fink's extreme position in his battle against those who argue against the continued use of bilateral ECT because it has been shown to cause more cognitive damage. Dr. Fink claims unilateral ECT (confined to the non-verbal, right side) is not as effective. And the book attempts to deflect the fall out from Dr. Sackeim's confessional editorial, which Drs. Shorter and Healy acknowledge, "flabbergasted" psychiatrists.

Chapter 1, "The Penicillin of Psychiatry?" sets the evangelical, revivalist tone, and decidedly unscientific framework of the book.

"So clear are the benefits of ECT for patients who might otherwise commit suicide, or languish for years in the blackness of depression, that there should be little controversy over whether it is safe or effective." [p. 3]

"Why, today, seventy years after its discovery, is ECT highly stigmatized, both patients and many physicians? ECT is, in a sense, the penicillin of psychiatry." [p.3]

The authors even adopted Dr. Fink's implausible promotional pronouncements extolling the virtues of ECT by adamantly denying its previously acknowledged, harmful effects. These unreferenced pronouncements are unsupported by empirical evidence:

"Therapeutic convulsions induced by electricity do not harm the brain and can save lives" [p.9]

"There is no doubt that ECT is effective in the prevention of suicide" [p. 97]

"There is no known occurrence of brain damage associated with ECT." [p. 104]

"ECT does not lend itself well to abuse because it is painless: the patient is immediately unconscious." [p. 94]

"No neurologic sequelae to treatment can be demonstrated." [p. 212]

However, as neurologist, Peter Sterling, MD, noted in his letter in Nature (2001),

"ECT damage is easy to find if you look for it."

<http://retina.anatomy.upenn.edu/pdffiles/5448.pdf>

The credibility of the book is undermined by the authors' heavy reliance on Dr. Fink as a source—given his demonstrable bias—and their failure to present the informed concerns of neurologists who have no stake in this war. John Friedberg, MD, the author of *Shock Treatment is Not Good for Your Brain*, (1976) was the first neurologist to raise objections against its use. In 1977 he wrote in the *American Journal of Psychiatry*: "Like other insults to the brain, ECT produces EEG abnormalities. The potency of ECT as an amnestic exceeds that of severe closed head injury with coma." [21] He reviewed the ECT data from six states that mandate reporting of adverse ECT effects, and found evidence of brain damage and memory loss. He noted that ECT proponents' data frequently belie their claimed findings.

Rather than address the mounting empirical evidence documenting the case against ECT—which hinges on its short-lived efficacy outweighed by long-term memory loss and cognitive harm [11] [22]—Drs. Shorter and Healy employ psychiatry's time-worn ploy. They divert attention from evidence of its damaging therapeutics. They frame the contentious controversy surrounding ECT as an orchestrated political battle by 'anti-psychiatry' forces against the profession—exactly as Dr. Fink has done. They blame Scientology, the

press / media, the movies, and they blame psychologists for "stigmatizing" ECT:

"CCHR and the Church of Scientology have since consistently been the most sustained critics of psychiatry and especially of ECT, within the United States." [p. 184]

"There is no doubt that in its fantastical depictions of ECT, the movie industry played a capital role in stigmatizing the procedure." [p. 153]

Ken Kesey's book / movie, "One Flew Over the Cuckoo's Nest," is cited 9 times.

Psychologists, the authors suggest, have sided with patients "as a tactic in professional rivalry" using memory loss "as a wedge in battering down the citadel of medical authority." [p. 242]

A single controlled study is presented by the authors to substantiate their efficacy claims. The study, by Drs. Tillotson and Sulzbach, was conducted in 1945 at McLean Hospital. Its reported positive recovery results are described twice, [p. 80, p. 96] followed by the exuberant reaction of ECT champion, Dr. Kalinowsky, who brought ECT to the US: "In this group, amazing recoveries are achieved in the majority of all treated cases." [p. 81]

"Shock Therapy" authors then claim: "Because of the extraordinary success of ECT in medicine, by the late 1940s its curative value was understood in other areas of American society." [p. 81]

They cite malpractice cases judged on the basis of likelihood of ECT's curative effect, lamenting the good old days when "there were no anguished worries about memory loss, no antipsychiatry groups, and no squeamish psychologists and social workers shying away from a 'brutal' therapy." [p.82]

However, they fail to present any of the evidence—from scientifically valid studies—that might explain why the protests came about. [11] [22]

How can a credible history of ECT fail to present documented evidence of brain damage, memory loss, and cognitive deficits, most reported by credentialed neurologists and psychiatrists, including ECT proponents?

For example, a 1986 controlled study comparing the brain scans of 101 depressed patients who had received ECT with the scans of 52 normal volunteers. The study, not intended as an ECT evaluation, found a significant relationship between ECT treatment with brain atrophy. The study also showed that the brain abnormalities correlated only with ECT, and not with age, gender, severity of illness, or other variables. [23]

As early as 1950, Dr. Irving Janis, (1950) of Yale University conducted a series of well-designed, matched controlled follow-up studies. [24] These studies are recognized as methodologically unique in the ECT scientific

literature: their importance is noted by neurologists, independent scientists, and patients. His method directly addressed the concern of the patients and to date is considered the most sensitive and scientifically valid. Janis studied the effects of ECT on depressed patients' memory by testing them before and after ECT-and by comparing their memory loss with matched controls who had not undergone ECT. By examining patients' memories 2 ½ to 3 ½ months after ECT-and following some of the patients in a year long follow up study-Janis could determine whether an individual patient showed changes in memory, and whether the ECT group differed from the matched group of controls. Janis reported that ALL ECT patients had "profound, extensive" amnesia for at least 10 to 20 life experiences. The controls, who had not been subjected to ECT, had no memory difficulties. No one has raised serious criticism of the Janis studies. Despite the fact that such tests are easy to carry out, no ECT researcher has attempted to replicate them. Why?

Irving Janis is not even accorded a citation in the index--his findings are misrepresented:

"One possibility was that patients actually learned a protective amnesia, as opposed to having amnesia directly caused by the treatment." [p. 209]

The authors dismiss patients' testimonies and trivialize their concerns about memory loss: "In informed circles, serious memory loss has seldom been considered real." [p.111] The arrogance betrayed by that statement mirrors the dismissive indifference shown by FDA officials who characterized concerns about an increased suicide risk linked to SSRI antidepressants as a "public relations" problem.

<http://ahrp.blogspot.com/2007/09/alison-bass-hits-bulls-eye-in-op-ed.html>

Drs. Shorter and Healy attribute implausible political power and influence to the victims of ECT while failing to discuss the evidence presented in recently published authoritative reports. For example, the first-ever, government sponsored, systematic review of patients' views on ECT (2003) [25] was so compelling, it led the UK National Institute for Health and Clinical Excellence (NICE) to issue new guidelines recommending cognitive assessment after each ECT for memory loss; that treatment be stopped if adverse cognitive effects manifest; the use of validated psychometric scales; and inclusion of user perspectives on the impact of ECT, and the incidence and impact of important side effects such as cognitive functioning. [26]

The review analyzed 26 studies, 19 conducted by scientists, 7 by former patients. The findings confirmed other independent analyses: ECT's efficacy is short-lived while 30% of patients suffer lasting biographical memory loss after ECT. The authors of "Shock Therapy" disparage the review because of the presence of former patients on the NICE committee, suggesting: "the line

between research and advocacy can be a thin one." [p. 249]
"it is not inconceivable that the Mind representatives heavily influenced
the document." [p. 250]

Instead of addressing the legitimate medical concerns and the evidence, the authors invoke a mystery-shrouded faith: "Why convulsive therapy, giving patients epileptic seizures, should be restorative in psychiatric illness remains a mystery even today." [p.6]

"The charge of brain damage from ECT is an urban myth, one first put forward by the development of a rival therapy, Vienna's Manfred Sakel, who tried hard to subvert his competition." [p. 3]

The book was launched on Oct. 24, 2007 at the New York Academy of Medicine by Edward Shorter, Max Fink, and Lee Wachtel, MD, who comprised a panel discussing: The History of Convulsive Therapy from Depression to Autism: Past Uses, Future Possibilities.

<http://www.nyam.org/initiatives/im-histearch.shtml>

Dr. Wachtel is Medical Director and attending child psychiatrist of the Neurobehavioral Unit at the Kennedy Krieger Institute, with particular interest in the use of ECT for autistic children. So this book's launching was a step toward market expansion with Dr. Fink leading the way by targeting children for Shock therapy-just as psychiatry's other radical practitioners are targeting children for expanded use of antipsychotics. Dr. David Healy did not attend the book launching.

Accompanying articles to be posted on the AHRP blog:

1. Peter Sterling, MD. Testimony to: New York State Assembly Committee on Mental Health Mental Retardation & Developmental Disabilities, July 18, 2001.
2. Sackeim, Harold A. Memory and ECT: From Polarization to Reconciliation. Journal of ECT. 16(2):87-96, June 2000.

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2. Sterling, P. Testimony Prepared for the Standing Committee on Mental Health of the Assembly of the State of New York. October 5, 1978.
<http://www.ect.org/effects/testimony.html>;
3. Kallinowsky, L. Cited by Whitaker, Mad In America, p. 99 Ref. 2.
4. Myerson, A. Borderline cases treated by Shock, Amer. J Psychiatry, 100

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5. UK ECT Review Group (2003) Efficacy and safety of electroconvulsive therapy in depressive disorders: a systematic review and meta-analysis. *Lancet*, 361, 799-808

6. Fink, M. Effect of anticholinergic agent, Diethazine, on EEG and behavior, *Archives of Neurology and Psychiatry* 80 (1958):380-386. In 1966, Fink indicated that his research showed a positive "relation between clinical improvement and the production of brain damage or an altered state of brain function." See: Fink, M. Cholinergic aspects of convulsive therapy, *Journal of Nervous and Mental Disease* 142 (1966):475-481. And in his 1979 textbook, Dr. Fink wrote: "A more prominent neurological sequel to seizures is the change in mental state and the development of an organic mental syndrome. an organic psychosis may occur with few treatments." See: Fink, M. *Convulsive Therapy: Theory and Practice*, Raven Press, New York, 1979. Cited by Whitaker, R. *Mad in America*, p. 102, Ref. 2.

7. For example, Richard Abrams, MD does not usually disclose in his academic writings that he is President of Somantics, the manufacturer of the Thymatron ECT device. See: Cameron D. ECT: Sham Statistics, the Myth of Convulsive Therapy, and the Case for Consumer Misinformation, *Journal of Mind and Behavior* Winter and Spring 1994, Vol. 15, Pages 177-198. See also: Dukakis, K., & Tye, L. *Shock: The healing power of electroconvulsive therapy*. (2006). New York: Avery. Furthermore, in sworn court testimony, ECT proponents acknowledged their financial conflicts of interest-as will be documented in a forthcoming book by Linda Andre.

8. Dr. Fink's videotaped informed consent instructions for ECT are distributed by Somantics, manufactures of ECT machines. Its owner, Richard Abrams, is a close ally of Dr. Fink. [See Ref. 1 above] Given Dr. Fink's adamant denial that ECT efficacy is short lived, whereas memory loss and cognitive impairments for as many as 30% of patients persist-his standard for informed consent is invalid. However, such signed consents may serve as liability protection for practitioners.

9. American Psychiatric Association. Report of the Task Force on Electroconvulsive Therapy. 1978. Survey pp..1-6.

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See also: comprehensive ECT bibliography on PsychRights Law Project:

<http://psychrights.org/index.htm>

See also: annotated bibliography by Linda Andre:

<http://psychrights.org/Research/Digest/Electroshock/AndreBibliography.htm>

See also: links to many ECT studies:

<http://www.ect.org/resources/studies.html>

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See also: comprehensive ECT bibliography on PsychRights Law Project:

<http://psychrights.org/index.htm>

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<http://psychrights.org/Research/Digest/Electroshock/AndreBibliography.htm>

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