

Electroshock: On How and Why It Lingers on Long After Insulin Coma Shock and Lobotomy Are Gone

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Mid-20th century psychiatry routinely touted and performed a trio of barbarisms on unwitting or unwilling citizens; insulin coma shock, ice pick lobotomy, and electroshock were treatments of choice. In the second half of that century, 2 of the 3 were stopped. Insulin coma shock ended because it became too difficult for even the glamour and mystification of psychiatric propaganda to cover up the fact that this horrific treatment was literally killing too many people. Not long after—despite a Nobel Prize to its founder, Egas Moniz, and a period of fame and notoriety to its main United States practitioner, James Freeman—the severing of people's frontal lobes by an ice pick through their eye sockets was stopped. The leadership of psychiatrist Peter Breggin was key in forcing a halt to lobotomy. So 2 of this terrible 3 have joined a long history of psychiatric atrocities no longer practiced, yet electroshock somehow endures. The lobotomists have been disgraced, but the shock doctors, including people like Max Fink who infamously declared in 1996 that “ECT is one of God's gifts to mankind” (as cited in Boodman, 1996), carry on. What are the facts about electroshock, also known as electroconvulsive treatment, or electroconvulsive therapy (ECT)? How and why is it still used today? In this essay, I will explore these questions and provide some answers.

Keywords: electroshock; psychiatry; electroconvulsive therapy (ECT) safety; electroconvulsive therapy (ECT) efficacy; survivors

What is electroconvulsive therapy (ECT)? One necessary answer is simply to describe the procedure. Very briefly, electroshock involves the production of a grand mal convulsion, similar to an epileptic seizure, by passing from 70 to more than 400 V of electric current through the brain for 0.5–4 seconds. Before application, ECT subjects are typically given anesthetic, tranquilizing, and muscle-paralyzing drugs to reduce fear, pain, and the risk (from violent muscle spasms) of fractured bones (particularly of the spine, a common occurrence in the earlier history of ECT before the introduction of muscle paralyzers). The ECT convulsion usually lasts from 30 to 60 seconds and may produce life-threatening complications, such as apnea and cardiac arrest. The convulsion is followed by a period of unconsciousness of several minutes' duration. Electroshock is usually administered in hospitals because they are equipped to handle emergency situations, which often develop during or after an ECT session.

Real understanding of electroshock, however, requires more in the way of an answer. Psychiatrists, even if they do not, like Max Fink, declare it sacred, argue that ECT is a key treatment for their profession in being doctors for people suffering from mental illness. Because the medical profession is supposed to be based in science, the facts about

electroshock's safety and effectiveness ought to guide its practice that this is not the case is a clear indicator that we must look deeper than psychiatric rhetoric to explain what ECT really is. If it is not, as I argue, a legitimate medical procedure, then what is it, and what are its functions? Before addressing this question, we must first take a brief look at the facts regarding safety and effectiveness of electroshock, the two main factors in evaluating any medical treatment.

ELECTROCONVULSIVE THERAPY SAFETY

Electroshock is not safe. Common sense tells us that, given that the natural electrical activity of the brain is in millivolts, thousands of a volt, it cannot possibly be safe to send hundreds of volts of electricity directly into the brain. University of Pennsylvania neuroscience professor Peter Sterling (2001) put it this way in testimony at a 2001 hearing on ECT before the New York Assembly Standing Committee on Mental Health, Mental Retardation, and Developmental Disabilities:

ECS [ECT] unquestionably damages the brain. The damage is due to a variety of known mechanisms:

- (1) ECS is designed to evoke a *grand mal* epileptic seizure involving massive excitation of cortical neurons that also deliver excitation to lower brain structures. The seizure causes an acute rise in blood pressure well into the hypertensive range, and this frequently causes small hemorrhages in the brain. Wherever a hemorrhage occurs in the brain, nerve cells die—and nerve cells are not replaced.
- (2) ECS ruptures the “blood-brain barrier.” This barrier normally prevents many substances in the blood from reaching the brain. This protects the brain, which is our most chemically sensitive organ, from a variety of potential insults [injuries]. Where this barrier is breached, nerve cells are exposed to insult and may also die. Rupture of this barrier also leads to brain “edema” (swelling), which, since the brain is enclosed by the rigid skull, leads to local arrest of blood supply, anoxia [lack of oxygen], and neuron death.
- (3) ECS causes neurons to release large quantities of the neurotransmitter, glutamate. This chemical excites further neuronal activity which releases more glutamate, leading to “excito-toxicity”—neurons literally die due to overactivity. Such excito-toxicity has been recognized relatively recently and is now a major topic of research. It is known to accompany seizures and over repeated episodes of ECS may be a significant contributor to accumulated brain damage. (quoted in Frank, 2006, p. 140)

Historically, doctors acknowledged the reality of ECT-caused brain damage soon after the procedure was introduced, and statements to that effect are easily found. Electroshock survivor, author, and activist Leonard Roy Frank's (2006) *The Electroshock Quotationary* is the best single source for a review of the history of electroshock. Here is an example from Walter Freeman, who introduced the lobotomy in the United States and was its most ardent practitioner and promoter:

All of the above-mentioned methods [i.e., various forms of shock and drug treatments] are damaging to the brain. . . . Maybe it will be shown that a mentally ill patient can think more clearly and more constructively with less brain in actual operation. (Freeman, 1941)

In 1978, Max Fink, currently the world's leading proponent of ECT, stated that "the principal complications of EST are death, brain damage, memory impairment, and spontaneous seizures. These complications are similar to those seen after head trauma, with which EST has been compared." Frank points out that 11 years later, Fink was quoted in a magazine article as saying,

I can't prove there's no brain damage [from ECT]. I can't prove there are no other sentient beings in the universe, either. But scientists have been trying for thirty years to find both, and so far they haven't come up with a thing. (Rymer, 1989, p. 7)

Just as Max Fink evolved into a great brain damage denier in the course of his career as a zealous promoter of electroshock, one of his heir apparents, psychiatrist David Healy, author with Edward Shorter of a 2007 book enthusiastically promoting ECT, wrote that "the charge of brain damage is an urban myth" (Healy, 2008, p. 3). Another current psychiatrist touting ECT is Sarah Lisanby, testified at the 2011 U.S. Food and Drug Administration (FDA) hearings on the classification of ECT devices that "scientific evidence and peer-reviewed medical literature supports the safety and efficacy of ECT." None of these statements are true.

John Friedberg summarizes much of the autopsy evidence in his 1976 book, aptly entitled, *Shock Treatment Is Not Good for Your Brain*. In his contributory article to Robert Morgan's (2005) collection, Friedberg summarizes the brain damage evidence he compiled, mostly from autopsies: "The damaging effects on the brain are thoroughly documented. All told, there have been 21 reports of neuropathology in humans." Fink's sarcastic comment about his inability to prove there is no brain damages notwithstanding, Friedberg goes on to say, "It is interesting that, despite the importance of a negative finding, there has not been a single detailed report of a normal human brain after shock" (p. 35). After such terrible autopsy findings, the electroshock industry learned to avoid it.

Psychiatrist Peter Breggin has also written extensively on electroshock. Here is his summary of one comprehensive review of the literature:

There is an extensive animal research literature confirming brain damage from ECT. The damage is demonstrated in many large animal studies, human autopsy studies, brain wave studies, and an occasional CT scan study. Animal and human autopsy studies show that ECT routinely causes widespread pinpoint hemorrhages and scattered cell death. While the damage can be found throughout the brain, it is often worst in the region beneath the electrodes. Since at least one electrode always lies over the frontal lobe, it is no exaggeration to call ECT an electrical lobotomy. (1998, p. 15)

Friedberg once explained to me that, for a neurologist, the *sine qua non* of brain damage was memory loss, and over the decades memory loss was minimized and denied by the shock industry. Electroshock survivor, author, and activist Linda Andre (2009) lays out the ugly story of denial in her book in great detail. Perhaps most egregious is the consistent refusal of the industry to listen to its victims. I will say more about this later, but the point is that there are countless people telling their stories of profound and tragic memory loss, and anyone willing to listen can see the truth. My own experience with this in seeing both the lack of informed consent and the effects of electroshock in numerous electroshock survivors suffering greatly from profound memory loss led me to write what I thought an authentic informed consent would look like (Breeding, 2000a). Here is just one example of the culture of denial from the Royal College of Psychiatrists in 1997: "As far as we know, ECT does not have any long term effects on your memory or intelligence."

In fact, the evidence is crystal clear that electroshock causes memory loss, often profound. To cite just one example, I will simply quote another electroshock proponent, for a long time one of the great deniers of ECT induced memory loss, psychologist Harold Sackeim (2001), who finally admitted in an editorial in *The Journal of ECT* that “virtually all patients experience some degree of persistent and, likely, permanent retrograde amnesia” (p. 229). Even the most ardent electroshock “expert” proponents now admit memory loss. More recently, Sackeim and his colleagues published the results of an important study in the January 2007 issue of *Neuropsychopharmacology*. They acknowledged that ECT may cause permanent amnesia and permanent deficits in cognitive abilities, which affect ability to function: “This study provides the first evidence in a large, prospective sample that adverse cognitive effects can persist for an extended period and that they characterize routine treatment with ECT in community settings” (2007, p. 253).

People in the building trades do their best to prevent people from being injured by electrical shocks. Neurologists and epileptologists prescribe anticonvulsant drugs to prevent seizures because they are known to damage the brain. Regrettably, other neurologists have not spoken out on shock the way John Friedberg did. Professor David Cohen, at the time editor of the journal *Ethical Human Sciences and Services*, wrote an important commentary in 2001 on the subject of why. Here is Cohen’s conclusion:

Neurologists observe that seizures can and do cause various types of brain damage and dysfunction but are strangely silent about the potential for brain damage and dysfunction from seizures provoked by ECT, a controversial treatment with the most direct pertinence to their expertise. Some psychiatrists openly admit that loneliness causes depression, which is treated by inducing grand mal seizures in the brains of the lonely. Something is definitely wrong with this picture. (2001, p. 128)

Here I must state the obvious: If there are autopsy studies, then *ipso facto*, people have died. A procedure that kills you is clearly unsafe. The worst outcome of electroshock is death. Leonard Frank (2006) has provided one of the best summaries of the extant data on electroshock-induced death, showing that estimates vary widely; journalist Sandra Boodman provides a little perspective:

According to the 1990 APA [Task Force] report, one in 10,000 patients dies as a result of modern ECT. This figure is derived from a study of deaths within 24 hours of ECT reported to California officials between 1977 and 1983. But more recent statistics suggest that the death rate may be higher. Three years ago [1993], Texas became the only state to require doctors to report deaths of patients that occur within 14 days of shock treatment and one of four states to require any reporting of ECT. Officials at the Texas Department of Mental Health and Mental Retardation report that between June 1, 1993 and September 1, 1996, they received reports of 21 deaths among an estimated 2,000 patients. (1996)

That is a huge range. The Texas Department of Mental Health’s 3-year study found that 1 in 95 patients had died within 14 days of undergoing ECT; in contrast, the American Psychiatric Association (APA) report estimated 1 death in 10,000 ECT patients.

The highest death rate I have found is a study showing one in four among the older adults. U.S. shock psychiatrists David Kroessler and Barry Fogel (1993) reported on the treatment of 65 depressed patients 80 years of age or older upon admission to the Rhode Island Hospital in Providence, between the years 1974 and 1983. Thirty-seven were treated with ECT and 28 with antidepressant drugs. At 1 year following treatment, the

authors found a 73.0% survival rate for the ECT group and a 96.4% survival rate for the non-ECT group. That is, 10 deaths among the 37 ECT patients and 1 death among the 28 non-ECT patients.

The fact is that besides the reality of autopsy studies, we now have further evidence, such as a 2012 study (Perrin et al., 2012) that showed significant frontal cortical connectivity damage using functional magnetic resonance imaging (MRI). Predictably, the authors twist the evidence of damage to argue support for the theory that ECT patients have too much connectivity and thus a reduction is helpful, calling to mind Walter Freeman's notion from 1941, quoted earlier, that mentally ill people would do better with less brain activity. A year later, electroshock psychiatrist Abraham Myerson, following a report of two ECT fatalities and the resultant autopsy findings:

I believe there have to be organic changes or organic disturbances in the physiology of the brain for the cure [with electric convulsive therapy] to take place. I think the disturbance in memory is probably an integral part of the recovery process. I think it may be true that these people have for the time being at any rate more intelligence than they can handle and that the reduction of intelligence is an important factor in the curative process. I say this *without cynicism* [emphasis added]. The fact is that some of the very best cures that one gets are in those individuals whom one reduces almost to amentia. (as cited in Frank, 2006, pp. 14–15).

At least Freeman and Myerson are direct about it. Unraveling this Orwellian nightmare is confusing because the modern apologists hide behind theoretical jargon about overly dense neural connectivity, but really it becomes simple when one accepts Peter Breggin's (1997) long-stated position that all biopsychiatric interventions are brain-disabling. "Biopsychiatric treatments are deemed effective when the physician and/or the patient prefer a state of diminished brain function with its narrowed range of mental capacity or emotional expression" (p. 4). *The damage is the therapeutic effect.*

There is a great deal more beyond physical and cognitive damage that could be said about the dangers of electroshock; here, I will only mention a few of the more important psychological effects:

1. Suppression of emerging distress material
2. Suppression of ability to heal by emotional release
3. Creation of emotional distress, including deep feelings of terror and powerlessness
4. Promotion of human beings in the roles of victims and passive dependents of medical professionals
5. Confirmation of patients' belief that there is something really wrong with them (shame)

Electroshock sometimes kills. It always causes brain damage and memory loss; the question is simply how much. From an evaluative point of view, though, even if a procedure occasionally kills you, it can still be argued that it is worth the risk. In the language of medical ethics, the conversation is about risk versus benefit. The risks are severe, so let's now consider the benefit.

ELECTROCONVULSIVE THERAPY EFFICACY

Max Fink calls electroshock God's great gift to mankind. David Healy (2008) says, "ECT is the most effective treatment or severe depressive disorder." Sarah Lisanby testified at

the 2011 FDA hearings on the classification of ECT devices that “ECT saves lives. ECT is the most effective and rapidly acting treatment for severe depression available today.” The truth about electroshock, according to the industry is that it is very effective. While still denying brain damage and tending to minimize the reality of memory loss, at least some of the psychiatric electroshock industry has been forced to acknowledge that memory loss is real and common. Its proponents, even when they acknowledge this, still cling to the notion just stated that it is so very effective.

I again see it very differently. Besides the fact that electroshock directly violates the Hippocratic oath to first do no harm, what apparent short-term benefit there might be is no better than a placebo. Randomized, prospective, placebo-controlled trials comparing the administration of real ECT versus sham ECT under double-blind conditions have been done. In the sham ECT condition, the patients receive a general anesthetic, are hooked up to the ECT machine, the button is pushed, but no current is delivered. As psychiatrist Colin Ross (2006) reports in his review of the literature, sham electroshock (anesthesia but no electroshock) has the same short-term outcomes as electroshock, and there is no evidence that it provides a lasting beneficial effect. Many studies failed to find a difference even during treatment. Read and Bentall (2010), in another very thorough review of the literature on ECT effectiveness, confirm Ross’s conclusions.

Richard Warner (2007) did an in-depth analysis of the data on ECT effectiveness; his analysis looks at two fundamental factors: response rate and relapse rate. Response rate refers to the percentage of individuals whose depression is reduced after undergoing ECT.

Relapse rate measures how long the response lasts. Electroshock proponents attest to amazing numbers in response rate. For example, in her aforementioned 2011 FDA testimony, Lisanby declared that “up to 80 to 90 percent of people experience a complete recovery.” Lisanby’s assertion is shared by the 2001 APA task force report on ECT:

Among patients who are receiving ECT as a first-line treatment or who have received inadequate pharmacotherapy during the index episode because of medication intolerance, response rates continue to be reported in the range of 80%-90% (Prudic et al., 1990, 1996). Among patients who have not responded to one or more adequate antidepressant trials the response rate remains substantial, falling in the range of 50%-60% (Prudic et al., 1996; Sackeim et al., 1990b, 2000). (quoted in Warner, 2007, p. 6)

Because most ECT recipients have taken significant pharmacological cocktails, the lower 50%–60% figure is more accurate, but even so, this requires further examination.

How do these researchers measure response? One primary measure uses the Hamilton Rating Scale for Depression (HRSD) score, a self-report checklist. Warner’s (2007) review details the tendency of researchers to emphasize the highest numbers found by the least stringent criteria for success. Read and Bentall (2010) also show that sometimes the criteria may be even less than a rating scale, often simply a rating of the opinion of the treating psychiatrists.

Even if we grant an immediate short-term lessening of depression symptoms for 50%–60% of ECT recipients in research settings, it is significant that the team of the lead researcher most often cited by the proponents of electroshock as evidence of its great effectiveness published a more recent study (Prudic, Olfson, Marcus, Fuller, & Sackeim, 2004) of ECT effectiveness in a community setting than those cited by Lisanby in her FDA testimony, which showed much poorer results. Prudic’s team found that “in contrast

to the 70%-90% remission rates expected with ECT, remission rates, depending on criteria, were 30.3%-46.7%" (p. 301). The study concluded, "The remission rate with ECT in community settings is substantially less than that in clinical trials" (p. 301). As Warner points out, 30.3% is a long way from 90%, but it gets worse.

Recall that the other criterion examined by Warner (2007) was relapse rate. Remission in this study was measured, on average, within 3 days of ECT termination, "with 318 of 347 patients (91.6%) evaluated within 10 days" (p. 304). According to the study, "A longer interval to assessment was associated with less improvement and lower rates of response and remission." (p. 304) Thus, if all the patients had been measured at least 1-week post-ECT, the remission rates would have been even lower. The study found "... on average, 10 days after ECT, patients had lost 40% of the improvement that accrued over the ECT course" (p. 304).

A New York man consulted with me recently about his experience as an ECT patient; he used a pseudonym, John Gaines, because like so many electroshock survivors, he did not feel safe to expose himself in that way. He told me that he had been a psychiatric nurse for more than three decades, when he became depressed and the prescribed drugs only seemed to make things worse. Feeling desperate, he went along with his psychiatrist's recommendation of ECT, and he became part of a research study on ECT effectiveness. Gaines' response was measured by a score on the Hamilton Rating Scale mentioned earlier, a score good enough that he was listed as one of the successes in the study data. His anguish came months later as he sunk back into depression, exacerbated by the fact that he was now deeply afraid and unable to work because of memory loss and cognitive impairment. This anecdotal story dramatically illustrates the failure of short-term rating scale outcomes as an adequate measure of ECT effectiveness and the need for better measures of both outcome and safety.

Read and Bentall (2010) found that *not 1* of the 10 studies they reviewed—comparing ECT to sham ECT treatment for depression—found significant differences beyond the treatment period. Another study by Harold Sackeim and his colleagues (2001) looked at 290 patients who completed a course of ECT; 159 (55%) were considered to be in remission 4-8 days post-ECT. This represents an initial 45% failure rate; 84 patients participated in the second phase of the trial. Warner (2007) provides a detailed analysis of the study, concluding that even though it was designed such that patients going on to Phase 2 would be the ones most likely to succeed, the results were dismal. The authors state in their conclusion, "Our study indicates that without active treatment, *virtually all remitted patients relapse* within 6 months of stopping ECT" (p. 1306, italics mine). This is clear evidence of the failure of electroshock to help people with depression. Regrettably, psychiatry has set such massive bulwarks that they can defend against even the greatest assaults of truth. The title of Sackeim's 2001 article is illustrative: *Continuation Pharmacotherapy in the Prevention of Relapse Following Electroconvulsive Therapy*. The title is not about ECT effectiveness or lack thereof. It is about "prevention of relapse." Through the lens of biopsychiatry-tinted glasses, one cannot see treatment failure but only the stubborn intractability of mental illness and the need for continued treatment; even failure becomes a call for more treatment. Sackeim here is calling for more drugs; many shock doctors call for "maintenance ECT."

Despite the evidence, ECT doctors believe it works. Perrin and colleagues (2012) are voicing a current trend of psychiatrists to argue that ECT works by "reducing neural connectivity," an incredible reframing of brain damage. Russ Rymer (1989) interviewed a

number of doctors about ECT. One leading practitioner, Richard Weiner, honestly admitted, “We don’t know exactly how it works” (p. 70). Max Fink proclaimed that

I have the only really good mainstream theory. The seizure causes the brain to produce a hormone which regulates the levels of other bodily hormones essential to our well-being. It’s a magic substance, somewhat similar to insulin for diabetics. We haven’t found this hormone yet, but I’ve made up a name for it. I call it “antidepressant.” (p. 70)

Peter Breggin had a much simpler explanation: “It’s so uncomplicated, it’s embarrassing. ECT causes organic brain syndrome” (p. 70). John Friedberg’s (1976) conclusion: “All ECT does is produce brain damage, which some people like” (p. 70).

Public Relations Versus Science

As is quite clear from a review of the science, electroshock causes brain damage and memory loss and does not appear to provide even a short-term benefit beyond sham electroshock. How is it, then, that it continues and we hear the continuing clarion call for more, including people like Edward Shorter and others arguing for “making this treatment” available to more children? (Breeding, 2014) One answer is that the difference in our conclusions is best explained by the difference between public relations (PR) and science: that the psychiatric PR on electroshock has tended to overwhelm the science. Linda Andre’s *Doctors of Deception: What They Don’t Want You To Know About Shock Treatment* (2009) lays out the history and the evidence of scientific and human results versus the public relations spin used by the industry to justify continued use of electroshock. I highly recommend her book for a thorough analysis, but the gist of it is that beginning around 1972, courts began to take patient rights seriously and there began pressure both to regulate ECT and to do research on its safety and efficacy. The industry’s response was to decry the court actions; for example, Andre quotes Max Fink from 1974: “The laws of the nation are being changed so that the rights and privileges claimed by physicians are ending at a very rapid rate” (p. 73). The advent of the computerized axial tomography (CAT) scan was also a threat because it suggested the possibility of looking at brains without autopsy. So the APA’s public affairs division and its membership arm, the Joint Commission on Public Affairs went into high gear with various media efforts and publications by people like psychiatrist Joseph Morrissey (Morrissey, Burton, & Steadman, 1979), where an alleged fact that became a centerpiece of industry spokesmen, and even APA fact sheets for the next 25 years was first declared, without reference—that only 1 in 200 ECT patients experiences serious adverse effects such as permanent memory loss. This is still heard and seen in consent forms to this day. As to the possibility of authentic research exploring brain damage with CAT scans and such, this has, for the most part, been rigorously avoided in favor of rating scales and quality of life judgments.

PRs in many domains will respond to judgments of abuse by acknowledging past unfortunate practices and then celebrating modern advances. Although practices like lobotomy and insulin coma shock have been relegated to the historical museum, one of the most popular PR lines about electroshock is to tout “the newer, safer ECT.” Here is a quote by electroshock psychiatrist Zigmond Lebensohn about the “older ECT”:

During the 1940s and 1950s, electroshock was frequently given in the office of the psychiatrist without the benefit of anesthesia, muscle relaxants, or emergency equipment. In certain cases,

the psychiatrist would make a “house call” with his ECT machine, accompanied by a nurse or an assistant, and the treatment would be administered in the patient’s own bed. (as cited in Frank, 2006, p. 13)

The results of intense convulsions looked horrifying and often resulted in broken bones and teeth and other gross injuries. The move to suppress some of these physical reactions of seizure were not without controversy, however:

Use of relaxant drugs unquestionably increases the risk of a fatal accident. In weighing the relative merits of shock therapy with or without relaxants, the therapist might well ask himself the question: How many vertebral compressions would he be willing to trade for one fatality traceable to a relaxant drug? On the subject of risks associated with cardiovascular disease, it appears that if a patient can tolerate ECT combined with a barbiturate-relaxant cocktail, he can take it straight as well. A certain irreducible minimum of cardiac deaths will occur under any circumstances because the existing clinical and laboratory methods cannot predict accurately an impending coronary accident. (Radzinski, 1957, p. 443)

The very first victim of electroshock, to whom it was administered without consent by Italian Ugo Cerletti in 1938, clearly announced afterward: “not another one! It’s deadly!” Regrettably, this did not deter his tormentor from more shock (Szasz, 1971).

Lothar Kalinowsky, credited with being a major force in establishing ECT in the United States, was present at the historic occasion. He is quoted by electroshock psychiatrist Richard Abrams in the following passage:

Cerletti had been worried that something might go wrong with the first treatment, and it was given in secret. . . . When the first treatment went well, we were allowed to attend the second treatment. We were called together for the treatment with a trumpet! . . . According to my wife—because I don’t remember it exactly—she claims that when I came home, I was very pale and said, “I saw something terrible today, I never want to see that again!” (as cited in Frank, 2006, p. 12)

It is no wonder that having patients sedated and paralyzed would be desirable for all the witnesses to ECT. But the breaking of bones and teeth, however horrific, is secondary to brain damage. Contrary to claims by ECT defenders, newer technique modifications have made electroshock more harmful than ever. For example, because the drugs accompanying ECT to reduce certain risks raise the seizure threshold, more electrical current is required to induce the convulsion, which in turn increases brain damage. Moreover, whereas formerly ECT specialists tried to induce seizures with minimal current, suprathreshold amounts of electricity are commonly administered today in the belief that they are more effective (Cameron, 1994). Again, the more current, the more brain damage. As Leonard Frank has written and testified to legislative bodies:

If the body is the temple of the spirit, the brain may be seen as the inner sanctum of the body, the holiest of holy places. To invade, violate, and injure the brain, as electroshock unfailingly does, is a crime against the spirit and a desecration of the soul. (1994, p. 36)

Electroconvulsive Therapy and the Food and Drug Administration

Another important factor in ECT’s persistent presence is the failure of the FDA. During the first decades of ECT, there was no regulation of medical devices. Horror stories around

devices such as the Dalkon Shield contraceptive intrauterine device led to the Medical Devices Amendment to the Federal Food, Drug, and Cosmetic Act in 1976, bringing all medical devices under FDA regulation. There are three classes for the devices. Class I, such as tongue depressor, present with little-to-no risk. Class II, such as MRI machine and a condom, are considered low risk when used according to specified standards. Class III is high risk and general controls or performance standards are insufficient. The device industry is required to go through a premarket approval (PMA) process to prove itself to the FDA or else be taken off the market. As Andre (2009) reports, in 1978, the FDA commissioned a report on ECT safety and performance. The FDA report relied on a selective literature survey and a questionnaire survey of four ECT doctors. They did not call for a CAT scan study that could have really addressed the essential question of brain damage. As Andre says, "The story of the FDA and ECT is, from the outset, the story of basic scientific questions unasked and unanswered. It is the story of the scandalous lack of basic data smothered in endless literature reviews" (2009, p. 142).

The FDA took their report and called for a hearing on the reclassification of ECT devices from Class III to Class II. To Andre, the strangest thing is that the ECT device industry took no part in the 1979 hearing, that there is no other device whose manufacturers have turned this responsibility over to a professional trade. Nevertheless, in this first event, the FDA did the right thing and subsequently classified the device as Class III. They also called for PMAs, due in May 1982; in November, there was a public hearing on the APA's petition to reclassify ECT machines as Class II. The second event had a different result. Despite no real evidence, and despite the fact that 93% of the letters received from ECT survivors were against reclassification, the FDA committee voted unanimously to reclassify shock machines as Class II; an important qualification was contingent on the development of a performance standard, presumably ensuring safety. Of course, there was no demand for a CAT scan study by the FDA. Linda Andre herself, a survivor of electroshock, reports losing 5 years of her life including most of the knowledge and skills accumulated during 4 years of college. Andre actually submitted a petition herself in late 1985 calling for the FDA to commission a computed tomography (CT) scan of her brain, arguing that research on even one brain would be better than none. The FDA refused her petition, whereupon she and Marilyn Rice organized 123 other shock survivors to send in similar petitions, all refused.

In 1988, Andre finally had a neuropsychological evaluation, in which she discovered that her IQ score had fallen from a score of 156, 10 years earlier, to 118, a loss of 38 points. The report also included the following: "deficits in executive function, cognitive flexibility, abstract thinking, planning . . . severe deficits in her intentional and organizational abilities . . . severe enough to undermine her ability to work. Results clearly indicative of brain injury secondary to ECT . . ." (p. 9). For the FDA story up to 2009, I refer the reader to Andre's book; as to the bottom line regarding electroshock devices up to that time, as Andre wryly observes, no one thought the result would be decades of limbo because the machines have remained in Class III.

In fact, despite the industry's persistent failure to prove safety or efficacy, the machines have not been removed from the market. The FDA (2012) continues to avoid their legal mandate, and the industry keeps clamoring for reclassification. The most recent public hearing on reclassification was in Gaithersburg, Maryland, on January 27–28, 2011. I testified at that hearing, and my subsequent report on the proceedings is available on our Coalition's website (Breeding, 2011). For 5 years, the FDA avoided responding, and when they finally did on December 29, 2015, it should be no surprise, given the history I briefly

just summarized, that they offered a proposal to reclassify the devices as Class II, and a public docket is currently open. The title of Peter Breggin's (2016) blog on the subject tells the same old story: *The FDA Wants to Approve ECT Without Testing*.

According to the FDA's executive summary prepared for the 2011 hearing, 79% of 3,045 respondents as of January 2010 were against reclassification. Figuring in group respondents, the number doubled, and overall ten times as many were against reclassification as for it. Most of the complaints had to do with cognitive impairment and brain damage and then death. When considering damage, it is important to remember that FDA commissioner David Kessler has estimated that only 1% of adverse events are reported to the FDA.

Whereas the vast preponderance of responses to FDA calls for testimony on ECT device, reclassification in both 1982 and 2011 were from shock survivors against calling the machines safe because of their direct experiences of harm does not sway the FDA to take the machines off the market, or even to desist calls to reclassify them as Class II; I am sure that efforts of electroshock survivors are mostly responsible for stalling the move, at least to date. The FDA's rhetoric calls for science, yet they support the industry collusion that avoids really looking at brain damage. Equally egregious, they discount or minimize the overwhelming testimony of electroshock survivors (such as Marilyn Rice and Linda Andre in 1982 and Loretta Wilson and Dorothy Dundas and Dan Fisher in 2011) as anecdotal, or nonscientific.

Listening to Electroshock Survivors

There is an extensive autobiographical literature of electroshock survivors but little professional research on survivors' direct experience. One exception is a study by British psychologist Lucy Johnstone (1999), who interviewed in-depth 20 people upset by ECT. Her results point to a deep and troubling dynamic:

A variety of themes emerged, including feelings of fear, shame and humiliation, worthlessness and helplessness, and a sense of having been abused and assaulted. This had reinforced existing problems and led to distrust of psychiatric staff. Few had felt able to tell professionals of the strength of their reactions, implying a possible hidden pool of trauma. (p. 69)

Although fear, shame, and helplessness are common and tragic sequelae of ECT, there are many who rise from the proverbial ashes and demonstrate the courage and determination to speak out about their experience; here are a few examples.

It is remarkable that a procedure, which the industry continues to tout as safe and effective, has consistently been followed by a movement of protest and denunciation led by those who received the treatment. The survivor resistance movement has a long history (see, e.g., Frank, 2006; Morgan, 2005); I will mention just a few of its members. I, myself, was recruited in 1994 by Dianna Loper (now Posthauer) to be on the advisory board of the World Association of Electroshock Survivors (WAES). At age 24 years, Loper was given electroshock for postpartum depression and an inability to sleep after the birth of her child. After 24 treatments, she was released in a far worse condition and could no longer care for herself or her family. As a result, her husband divorced her, and her child was taken away by the courts (2007). This remarkable woman and her WAES colleague and fellow electroshock survivor Doug Cameron played primary leadership roles in getting

the Texas legislature in 1993 to pass what is still the toughest legislation on ECT in the United States.

I have already introduced Linda Andre, who begins her *Doctors of Deception: What They Don't Want You to Know About Shock Treatment* book with her personal story, and who has been a great leader in challenging ECT, especially with the FDA. She was inspired by another great leader, Marilyn Rice who was electroshocked in 1873 after serious dental problems and subsequent iatrogenic effects of negligent treatment. Prior to shock, Rice was an efficient and competent government bureaucrat. Andre devotes a chapter entitled, *The Making of an American Activist* to Rice in her book; she quotes Rice from a 1974 article in the *New Yorker*:

All my beloved knowledge, everything I had learned in my field during twenty years or more, was gone. I'd lost the body of knowledge that constituted my professional skill. I'd lost everything that professionals take for granted. I'd lost my experience, my knowing, but it was worse than that. I felt that I'd lost myself. (Andre, 2009, p. 109)

Leonard Roy Frank was incarcerated in California at age 29 or 30 years and given 85 shock treatments, 50 insulin coma, and 35 electroshocks. His memory loss was profound and he spent years working to regain vocabulary and reconstruct his library. He became a leading activist in the movement of psychiatric and electroshock survivors, a founding member of the Network Against Psychiatric Assault (NAPA), an editor and publisher of the *Madness Network News*, participant in various protest and legislative efforts in California and elsewhere, editor of the *Electroshock Quotationary*, and much more, until his death in 2015. Much of his work is easily found on the Internet; one source of many of his files is available on psychiatrized.org website.

Don Weitz and Sue Blankenship (recently deceased) are two electroshock survivor activists who help lead the Coalition Against Psychiatric Assault, a Canadian group that is very active in fighting electroshock. Electroshock survivor Juli Lawrence, who reports profound memory loss and cognitive damage from her experience in 1994, has a long-standing website (www.ect.org). David Oaks himself, a psychiatric survivor, but not electroshock, founded one of the leading activist support organizations, now called MindFreedom. Irish shock survivor Mary Maddock is leading an international MindFreedom initiative on Electroshock and Human Rights, profiled on the MindFreedom website. The Asylum Collective, based in the United Kingdom, devoted a recent issue of their *Asylum* magazine to electroshock.

Deborah Schwartzkopff has initiated a project called ECT Justice. Her website, www.ectjustice.com, asks for ECT survivors who feel they have suffered permanent damage to fill out a questionnaire. Schwartzkopff has compiled a thick manual she is sending to law firms across the country in an effort to find a legal team that will take on a class action lawsuit in product device and medical malpractice. So far, she has collected about 150 complainants. Schwartzkopff had 66 shock treatments and reports forgetting her two grown sons' lives, her college education, and countless memories of a 25-year nursing career. Fosse and Read's (2013) recent article on mechanisms of action in ECT suggests that Schwartzkopff's argument that electroshock is traumatic brain injury has merit:

We suggest that the temporarily improved scores on depression instruments following ECT reflect the combination of frontal and temporal lobe functional impairments and activation of the HPA axis and the mesocorticolimbic dopamine system. These effects as well as other detailed changes observed in structures such as the hippocampus appear consistent with those typically seen after

severe stress-exposure and/or brain trauma. Hence, we conjecture that central to the effect mechanisms of ECT is the impact upon the brain in a manner that is consistent with a unique type of severe stress-exposure or trauma. (p. 6)

There are so many others. Janet Gotkin underwent 100 electroshocks and wrote about her screaming pain in her 1975 book, *Too Much Anger, Too Many Tears*. In her subsequent activism, at a talk entitled *Electroshock: A Modern Medical Atrocity* that she gave at a plenary session of electroshock psychiatrists during the First International Conference of Electroconvulsive Therapy, she rhetorically asked whether these men are evil, and here is part of her answer:

I choose to be charitable and, rather than assuming malicious intent, assume a kind of benign but powerful avoidance on the part of these shock doctors of some painful truths about the nature of their chosen “therapy.” We must tell some of those truths, in the belief that all people are capable of change, that all people can be open to new ideas and long hidden truths, if they truly want to be. . . . (as cited in Frank, 2006, p. 112)

Ron Bassman (2011) details his story in *A Fight to Be: A Psychologist’s Experience From Both Sides of the Locked Door*. Like Leonard Frank, Bassman suffered both insulin coma and electroshock at a young age, which left huge holes in his memory and a weight of trauma. Frank (2006) has this to say about Bassman in his electroshock quotationary:

As one of the few practicing psychologists known to have undergone shock, Bassman has played a key role in explaining to his profession and the public what it’s like being diagnosed as mentally ill, institutionalized, and subjected to forced psychiatric procedures, and how the interests of the so-called mentally ill can be truly served (p. 61).

There are countless others, many of whom I have been honored to know. One woman most inspiring to me is Evelyn Scogin, who received at least 31 electroshocks in 2004 and 2005 at Seton Shoal Creek Hospital in Austin, Texas. Her story moved me to write an article about her near destruction and inspiring reemergence from psychiatric assault (Breeding & Scogin, 2012). The article shows how her story typifies the trajectory of psychiatric oppression from labeling and damage caused by polypharmic drug prescription and disability (Whitaker, 2010) and often electroshock. Scogin (2012) has become a vocal activist and has added her work to the list for survivor memoirs with her remarkable 2012 book *Descent: A Heroine’s Journey*. She is especially clear on the lack of authentic informed consent for electroshock. One of the many important issues around electroshock left unaddressed in this article is coercion. Forced ECT horribly exacerbates all the concerns discussed earlier and is still legal in all U.S. states but Texas. Scogin’s point is that, given the present reality—for example, patients under heavy drug loads, the vulnerability of people in desperation, and the denial and minimization of ECT dangers—there can be no truly informed consent in today’s climate of ECT administration.

Language as Power

The last answer I will provide to understanding how and why ECT continues lies in a dialectic of power and a defense of undeserved place and prestige for the profession of psychiatry (Breeding, 2000b). According to Thomas Szasz (1970), the process of diagnosing people as “mentally ill” and “treating” them with blunt instruments is about power in relationships.

“Mental illness” is a simple metaphor for physical illness. It does not describe the highly individual, unique thoughts or feelings or physical manifestations of those who carry the tag. It does not inform as to the process of human nature, development, distress, or healing.

The concept of “mental illness” is used as the decisive move in a discourse, a communication-defining relationship of psychiatric power. It does not describe but prescribes a complex dynamic of power relations with enormous, often devastating consequences. The prescription on the psychiatrist’s pad might say “12 sessions of ECT” to treat endogenous depression. A fuller exposition looks something like this:

She suffers from endogenous depression.
Her diagnosis is DSM _____.
She is mentally ill, chronic.
She needs my help.
Something must be done.
It is my job to help her.
Her illness is biological and genetic.
Her response to various drugs has not been good.
She is an ideal candidate for electroconvulsive therapy (ECT).
ECT is safe and effective.
I prescribe this treatment for her.
It is for her own good.
I am a good, caring doctor.

This is a short version of psychiatric truth, the Gospel according to the APA.

Mainstream psychiatry holds these assumptions to be obvious truths. Psychiatry, in fact, creates these truths by presenting and enforcing a language defining specific knowledge and power relationships. “Mental illness exists and must be treated. You are mentally ill and we will treat you.” Left out of this version of creating truth is the fact that mental illness is a metaphor. Just because a concept is believed and acted upon doesn’t mean it is real; the fact that countless people were persecuted for witchcraft doesn’t mean that they were witches. That ECT is inflicted upon thousands and thousands doesn’t mean they’re mentally ill.

CONCLUSION

Electroshock is dangerous and it does not work to help people recover from distress and become happier and more effective in their lives. An effective PR justifies its continuation as a tool in psychiatry’s skimpy basket of offerings: mostly drugs and secondarily ECT. As a person and as a psychologist, I am repeatedly humbled at the complex weaving of physical, emotional, mental, and what most people call spiritual energies in the human body and psyche. Depression is the label most often used to justify electroshock today, and I know there are gentler and safer ways to help people recover from depression. I am intellectually offended by the reductionistic, pseudoscientific theory of biopsychiatry that depression can be reduced to an assumed biological and/or genetic defect. I am emotionally hurt and angry to see people damaged by such a blunt and brutal instrument as electroshock, inflicted by the people they reach out to for help. This is a terrible violation of the Hippocratic oath and a human tragedy.

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