TPWKY – Ep 220 – ECT 1

[00:00:00]

Ilan: Hi, my name's Ilan. I'm a nurse practitioner. I have major depressive disorder, and ECT made my life worth living. My depression started around age 10 and steadily worsened. I just barely graduated college but could hold down a job and was never hospitalized. By my mid-twenties, I felt totally apathetic and hopeless. I struggled to eat without hunger, slept every hour outside work, and was obsessed with what was wrong with me and the thought of ending my life. I tried many treatments without success. I knew ECT was the most effective treatment for depression. I was a little concerned about the memory loss but decided a life less depressed without my memories would be better than the life that I was living.

My psychiatrist agreed it was a good idea. The treatments were shockingly quick and drama-free. Every few days I'd go in, the anesthesiologist put me under, I'd wake up groggy, have a snack, go home and sleep it off. After three treatments, I felt better in a way that I'd never felt before. Colors appeared more vivid, literally as if someone had turned up the saturation.

Everything seemed beautiful. I could actually feel love for the world and enjoy living in it. Side effects were minimal, but the short-term memory loss was real. For a few days after each treatment, I had a lot of difficulty with nouns, names. I could get lost in a familiar neighborhood or forget what we were talking about mid-conversation. This went away as treatments were spaced further apart. Long-term memories from the years leading up to ECT are there, but scrambled, as if someone rearranged my room. My stuff's still there but requires more looking to find. It's controversial how much that's caused by the ECT versus depression itself. Maybe the state I was in when forming those memories is so different from my present state that I have trouble accessing them.

The worst side effect is the stigma around ECT. This is the most important change in my life, and I worry sharing it with anyone risks how they see me or my career. Stigma is likely why my doctors didn't recommend ECT to me earlier, though I wish they had.

Five years after tapering off of maintenance treatments, I relapsed. I was successfully treated again with ECT. With recurrent depression, relapses are likely, and I feel reassured knowing that ECT works for me. Today, I still have some depressive symptoms, but much, much less. Sometimes I feel odd

nostalgia for my deeply depressed self. But unlike that person, I like who I am now, and I feel my life is worthwhile. I hope this helps decrease stigma and make others aware of ECT as an option worth considering.

EW: Thank you so much for sharing your story with us. It is, it's so incredibly meaningful and important to have these experiences available and to raise awareness and kind of demystifying de-stigmatize, ECT, and so we just, we really appreciate that you were willing to share your story. Thank you. Thank you. Thank you.

EAU: Yeah. Thank you so much. It really does mean. It means a lot.

EW: Yeah. Hi, I'm Erin Welsh

EAU: And I'm Erin Allmann Updyke.

EW: This is, this podcast will Kill you.

EAU: And today we're talking about ECT

EW: ECT?

EAU: Electroconvulsive therapy.

EW: Yes. Yes. Uh, a big topic. So big in fact, that we are splitting it into two whole episodes.

EAU: the thing we do these days.

EW: It is, it is. Um, I like it. I mean, it gives, it was, it was really, so this first episode will be about the history and next week we're talking all about the how, the what, the why, how does this work, what do we use it for? How effective is it? Stuff like that.

EAU: Yeah.

EW: But it was, yeah, it was really, it was really cool to, to get, to dive into another part of the history of medicine that I don't usually talk that much about.

EAU: Right.

EW: Maybe occasionally in past episodes we've touched on some things, but it wasn't like Hippocrates and ancient Egypt and then germ theory. Yeah, it's quite different.

EAU: this

EW: Quite a different thing. And so it was really cool to kind of get to, to look at ECT through that lens. There's a lot to get into. Um, and so before we can do that, it's quarantini time.

EAU: It's quarantini time.

EW: Are we drinking this week?

EAU: We're drinking shock

EW: talk Shock talk. We're,

EAU: we're talking

EW: we're talking shock.

EAU: week

EW: Yeah. Yeah. It's

EAU: What's in shock talk

EW: it's a pretty, it's a pretty delicious, straightforward bev. It's, um, grapefruit juice plus ginger ale, plus basil, because who doesn't love basil in a drink? It's so refreshing. I love when a drink has basil. I'm like, I want that. I want that. Um, but we will post the full recipe for [00:05:00] shock talk on our website. This podcast will kill you.com as well as on all of our social media channels if you're not already. Following us there You should be because there's, yeah, there's like so much that you're missing out on. So do, do follow.

EAU: It. Follow us there and you know, also check out our website. This podcast will kill you.com. You can find so many things there that you've heard many times before. Like all of the sources from every single one of our episodes and Blood Mobile, who does the music and our bookshop.org account and our Good Reads list and um, transcripts and merch and our Patreon page. I mean,

EW: It's endless. Well, not, no, not quite, but it is. Does have some things there. Check it out.

EAU: Check it

EW: We have no more business rate review. Subscribe. You were on YouTube?

EAU: We're on YouTube. Hello.

EW: Is it time now? Can we Great.

EAU: me everything about ECT,

EW: I, uh, well, I'll tell you some things right

EAU: of

EW: after this break.

If you've come across a depiction of electroconvulsive therapy, also referred to as shock therapy or electroshock therapy in any movie or TV show or video game even. 'Cause it apparently, yeah, there's a whole paper about like the depiction of, uh, electroconvulsive therapy in video games.

EAU: Video

EW: Video games. Yeah.

EAU: never played a video game. They don't have it in Tony Hawk Pro skater.

EW: I know. I'm like, I don't think it's in Zelda. As far as I'm aware,

EAU: Or

EW: that's the limit.

EAU: Mario. That's all I've

EW: Yeah. Yeah. Spyro.

EAU: It's not there either.

EW: Spyro, yeah. But the chances are that if you did come across ECT in one of these formats, it didn't leave a very positive impression on you. At the least. It came across as an archaic, misguided mode of treatment, and at the worst, it acted as like a barbaric torture device. Cruelly effective in erasing memories or bending someone to your will.

EAU: Hmm.

EW: And there was a paper that was published in 2016 that reviewed movies and TV shows across the globe that included ECT and found that the vast majority, 81% of movies and 72% of TV shows portrayed it inaccurately and in a negative light. Which is, I mean, it's like, not surprising, but it is extreme. I think it does really kind of underline like, yeah, this is, it's not, it's not really positively depicted ever.

EAU: Yeah, that is extreme

EW: Yeah.

EAU: is rarely portrayed accurately in any media, you know?

EW: I know that's a whole, that's a whole can of worms. Yeah.

EAU: Let's, let's

EW: Let's.

EAU: episode on that,

EW: Yeah, sure. Yeah, yeah. Um, but perhaps the most infamous and recognizable depiction of ECT is of course, from the 1975 film one flew over the Cuckoo's Nest,

EAU: Yep.

EW: Jack Nicholson's character, Randall McMurphy is punished for his anti-establishment behavior. He's forced to undergo ECT while restrained and fully conscious, the doctor's like this won't hurt a bit. It'll be over in just a minute, and

then the camera's like on. Jack Nicholson's face, and he's like convulsing in and in pain, you know, inaccurate.

EAU: Yeah. really extreme.

EW: have you seen, One Flew Over the Cuckoo's Nest?

EAU: I don't know if I've ever seen the whole movie, but I

EW: Okay.

EAU: seen part pieces of

EW: of it.

EAU: I re-watched that scene and I was like, oh, I recognize

EW: Yes.

EAU: I've definitely seen parts of it before, but yeah, it's a very extreme and not accurate today, at least.

EW: Depiction.

EAU: ECT.

EW: Yeah. And it's not the only, uh, negative portrayal or the most recent one. Few are accurate to how the procedure is conducted today. And few specify legitimate reasons for conducting the treatment, such as like treatment resistant depression. There are a few positive portrayals like the one in Homeland where Claire Danes' character undergoes ECT for bipolar depression I believe. And there's also one in call the midwife, which I don't remember if I've seen this episode, but there's a character. Yeah, she under, she undergoes ECT and shows improvement for, uh, pupil psychosis symptoms.

EAU: Oh, interesting.

EW: Yeah. But these positive depictions or these like more accurate depictions are few and far between, and so it's no wonder that people misunderstand and stigmatize ECT, you know, lumping it in with lobotomies as a relic of psychiatry's, sinister past. This can discourage someone from even considering

ECT as an option. And in this and next week's episode, what we're gonna do is deep dive into ECT and get to the bottom of the good because it can bring profound relief. The bad, there are potential side effects that you will explore. I know Erin and the ugly, you know, the history of psychiatry, just like the rest of the history of medicine. It's not always the rosiest, especially by today's standards.

EAU: An understatement,

EW: sort of really is. Yeah, yeah, yeah. But so today [00:10:00] I'm going to take us through the history of ECT when it originated, why it earned its fearful reputation, and how this therapy has stood the test of time. And then next week, Erin, you'll take us through the mechanics, what we know about why it works, and we're gonna bring on an expert in ECT to give us the lay of the land of ECT today and that. I am so excited. So that expert is Dr. Leonardo Lopez, who is Vice Chair for Inpatient Services at Weill Cornell Medicine's Department of Psychiatry. And I recently interviewed him for the other podcast that I host Advances in Care. Featuring work done by physicians at New York Presbyterian. Uh, but this episode where I I chat with Dr. Lopez is so interesting 'cause it, it is like, here's a little sneak peek. It highlights the use of ECT in a case of anti NMDA receptor encephalitis in a 6-year-old. Uh, tune in for more, like

EAU: Yeah.

EW: Check it out. You'll get a sneak peek of it. So it's, it's really, really interesting. But, uh, before we can get into the history of electroconvulsive therapy, I should first probably say what ECT is. So a of people,

EAU: don't

EW: a lot of people don't know.

EAU: doing this episode, he was like, I don't know what that is. And I was like, you like electroconvulsive therapy? And he was like, you're not talking about shock therapy, are you? And I was like, yeah,

EW: that is the reaction. That is the reaction from so many people. And I think that it, what it does is really show how powerful these depictions, these media portrayals of ECT are,

EAU: Yeah.

EW: Sort of perpetuating this misinformation surrounding it. Okay. Anyway, so let's, let's get something straight. What is ECT? ECT involves administering electrical currents to someone's brain as a therapy for severe psychiatric conditions such as treatment resistant depression. Specifically the goal is to induce seizures. Why it works, how it works, all that stuff I know you're gonna get into next week. That is what it is though

EAU: Yep.

EW: today, ECT is carried out under anesthesia and with muscle relaxants, and there is a rigorous procedure of informed consent, and it has a pretty high response rate. Like 70% of people will experience relief from symptoms and 60% of people will experience remission, which makes it one of the most effective psychiatric interventions that we have.

EAU: Yeah,

EW: It's

EAU: wild.

EW: wild. I think that that was one of the most surprising things to learn

EAU: Yeah,

EW: just how effective it has been reported to be.

EAU: 'cause you know, we did that episode on SSRIs and we had so many people write in about how much SSRIs have changed their life or have helped their symptoms, or maybe some didn't, and others did. And so to think that we have something that's so much, it's substantially more effective, significantly more effective than

EW: Yeah.

EAU: Alone. Um, especially in treatment resistant cases. Sorry, I'm going too

EW: I,

EAU: but yes, it's, it is really incredible.

EW: really is. It really is. And I think the other thing that is so fascinating about this is that of, of the somatic therapies we use today, it's one of the oldest.

EAU: Yeah.

EW: And I'll tell that story in a bit as to like how this survived the kinda the test of time, but to understand why people thought this might be a good idea at all. We have to go even further. Back in time

EAU: Okay.

EW: when electricity was effectively harnessed in the 18 hundreds, it seemed like magic. I mean, it still kind of seems like magic for sure.

EAU: me.

EW: Yes. Even though we did a whole episode on it, but the, the introduction of electricity, it transformed industry. It changed everyday life and in medicine it seemed to have limitless potential. It represented the future modernity and all the benefits that it could bring. And as it entered our homes and our daily lives, it also entered our vocabulary. Blow a fuse. Electrifying. Burned out. Juiced up, overloaded. There's, there's so much more there.

EAU: more puns there.

EW: Uh, and in the medical space, many people were hopeful that electricity could be used to cure anything and everything. Really, it was seen as, you know, it had this ability to give or restore life as in like Frankenstein, and take it away as in the electric chair. As the number of electrical medical devices grew without real scientific support or any scientific, any support whatsoever, researchers sought to understand how electricity was related to human physiology. The leading ideas had to do with like nerves, right? Nerves were thought to be powered by electricity. And so something like neurasthenia, like tired nerves could be caused by too much exposure to electricity and modernity at like modern life. Oh, the, you know, the challenges of modern life, and in which case you, you should rest, or it could be cured by electricity because your nerves have been depleted and so you just give a little boost. And so electricity, electricity took its place among other somatic treatments in psychiatry. I think I've used somatic a a couple times [00:15:00] before, but just to define meaning, like focused on the body as a way to heal the mind

EAU: Right.

EW: To psychotherapy as like the other type of therapy. Um, and so other somatic therapies from this era included things like cold therapy, water therapy, lobotomies, giving someone malaria to treat their neurosyphilis and things like that. That was a Nobel Prize winning. Thing.

EAU: Okay.

EW: Mm-hmm. So how do we go from these early imaginings of electricity and psychiatry to ECT? The idea that a mental illness, schizophrenia in particular, could be cured or relieved with a shock to the system. This began to take hold in the early 20th century and the first shock therapies were developed around the 1920s, not electricity, but instead insulin coma therapy, which was featured in a beautiful mind, uh, where patients were given huge doses of insulin resulting in seizures and comas

EAU: Okay. It's like hypoglycemia. Really extreme. Mm-hmm.

EW: Yep. Or Metrazole Shock Therapy, which was also known as Chemical Shock Therapy. Metrazole was the name of a drug that led to seizures.

EAU: Interesting.

EW: Yeah. And so the, the logic behind shock, the, particularly when it came to treating schizophrenia, which was the initial indication for these shock therapies, was that some psychiatrists believed that there was a direct link between schizophrenia and epilepsy, that they were kind of opposite each other on a spectrum of a disease. Mm-hmm. And so where did this idea come from? It came from a few different places. So first there was the observation that people with schizophrenia or in a catatonic state that then experienced a seizure seemed to recover following that seizure at least partially. The second was that schizophrenia and epilepsy rarely seemed to co-occur in the same individual, which was later disproven with observational studies, better observational studies. And the third was that in people who had certain psychiatric conditions, in addition to epilepsy, their symptoms were relieved. Tended to be relieved after a seizure.

EAU: After a seizure. How interesting.

EW: Yeah.

EAU: then they made this connection like maybe there's something here.

EW: Maybe there's something here. And so these psychiatrists reason that like, well, maybe we can treat mental illness using seizures by inducing seizures.

EAU: Interesting. So it was the seizures that were the first thing that people were like, this is the treatment, it's the seizure. We're gonna induce it in whatever way,

EW: Right.

EAU: hypoglycemia, other medications, et cetera.

EW: Exactly. Yeah.

EAU: I didn't know that.

EW: And so like in, in that way, it wasn't even like electricity. There was hype around electricity, but it wasn't in the way that it was. Like it went straight from let's electricity must cure this. It was just like that had been tried, but this was more, this was more based in almost like this physiological, uh, logic.

EAU: Right,

EW: Yeah. I don't know.

EAU: being the like

EW: The seizures being the key part of it.

EAU: That's so

EW: Yeah.

EAU: Erin.

EW: Yeah. And so the question remained though, what form of. Shock therapy was best, how best to induce a a seizure. Insulin coma therapy was very dangerous, even occasionally fatal and chemical shock therapy was really poorly tolerated. The drug metrazole seemed to cause extreme fear and dread. There was vomiting. Recovery was slow, and so physicians were like, we gotta find another way to do this.

EAU: They're like, we really are stuck on these seizure things.

EW: we're,

EAU: just,

EW: we're gonna stick with the seizure thing, but let's find a better way

EAU: way

EW: to yeah. Enter Italian psychiatrist, Ugo Cerletti as a director of a university psychiatry clinic in Rome. He had tried Metrazole, but he found the side effects to be too unpleasant. He was like, I don't wanna put my patients through this, and he learned there's no way to make this story pretty. He learned that in some slaughterhouses workers would shock pigs before slaughtering them. And this, the point of this was to stun them so that they would, uh, avoid the pain of slaughter. And some of these pigs after being shocked, would have a seizure. And so Cerletti took two things from this. Number one, it was possible to administer electrical shocks without resulting in death. And number two, those shocks could induce a seizure, and that gave him hope that electricity could be the newest shock therapy to treat schizophrenia and other mental illnesses. Yeah,

EAU: Okay.

EW: it's not. That is what it is

EAU: Yeah, that's how we got there.

EW: it's how he got there. And he wasn't the first to consider the psychiatric potential of e electricity. Apparently, ancient Greeks proposed its use, and Benjamin Franklin and Contemporary suggested that electricity applied to the head could relieve melancholia and caused memory loss.

EAU: He's not

EW: He's not wrong, but Cerletti was the first to successfully carry [00:20:00] out this hypothesis after doing some experimenting on animals, which resulted in many of them dying until he figured out how to safely administer shocks, he felt ready ish to try it out on a human.

In April, 1938, a man who was unable to speak, uh, coherently and apparently was living on the streets of Rome, was brought to the hospital after being detained by police. Cerletti decided that he would be patient one. And I said, ready ish, because Cerletti was anxious that he would kill this guy. And he was like, I'm really worried this is gonna, I'm gonna end up killing this man. We have to do this in total secrecy in case anyone finds out. So he and his team administered the first dose. No anesthesia, no muscle relaxants. I'd actually don't think that muscle relaxants were even available yet. Yeah. The first dose did not cause a seizure, but it allegedly made the patient breakout in song and plead to stop. They w they went forward with a second dose. Again, no seizure. And in Cerletti's mind, remember no seizure means that you haven't actually done any treatment yet. Yeah. And so should they do a third? The Cerletti was kind of nervous about like, should we do this? This seems dangerous. I don't know what to do, so I'm gonna read you an account from one of the members of his team, Alverno:

quote "Now, the question was whether to try again and when to stop before causing any harm. The patient had up to that point, been relatively unconcerned, but when Ser letti ordered that the voltage and duration be increased for another try, he seemed to realize what was happening and said, careful. The first was pestiferous. The second will be mortiferous. TTI gave the signal and a third impulse produced The usual contractions followed this time by a grand mal seizure. The patient became pale, then cyanotic, and stopped breathing. The corneal reflex disappeared and tachycardia set in. After 45 seconds there was a big breath and then the cyanosis disappeared. The pulse became normal and everybody felt relieved with a mixture of understatement and optimism. Cerletti said simply, 'I can presume that electric current can induce seizures and a man without risks.'" So

EAU: There's a lot there,

EW: there's a lot there. Um, yeah.

EAU: Yeah. Okay.

EW: So what happened to the patient? He showed remarkable signs of improvement.

EAU: Hmm.

EW: Cerletti was encouraged by this progress and continued with 11 more sessions. Not all in that same day, but like spread out over the next weeks and months.

EAU: same

EW: individual.

EAU: Okay.

EW: Over the sessions, the patient's delusions disappeared. He regained his memory and he went back to his family and work in northern Italy. And over the years, he and ti kept in touch and his recovery lasted for years and years, but the delusions eventually did return. For Cerletti, though this first success was proof positive that ECT had a place in psychiatry and he went on to administer the therapy to other patients. So he published a report of 36 patients treated with ECT. 11 patients showed complete remission, 20 showed improvement in symptoms, and five showed no change. Again, encouraging results. But Cerletti was hesitant to spread the word. He, he, he knew, he felt very strongly that ECT had tremendous potential, but he worried that it could lead to too much hype and indiscriminate use of ECT. And he's

EAU: Interesting.

EW: should proceed cautiously and only use this where we need to. And just like baby steps, baby steps.

EAU: Hmm.

EW: And in retrospect it's like, it's, that feels to me a little bit like, you know, you went ahead and did this on this guy. Like, what are you saying? Pump the brakes now. He didn't, He didn't, seem to proceed cautiously at all. But I think that this is where I, I wanna pause here in the history of ECT to kind of like situate ourselves in this time period and what was going on in the world of psychiatry broadly.

EAU: Yeah.

EW: The history of psychiatry is just like the rest of medicine, right? We, we look back and we shudder at what was once considered acceptable.

EAU: Right, like picking a guy up off the street who's brought in by the police and administering to him a therapy that's never been administered before with no informed consent and with no knowledge on whether or not this is safe without anyone from his family to agree to it. Like we would be like, this is horrific.

EW: Is, yeah, this is it. Truly. And, and there are certain things that we look back on now and we're like, lobotomies, insulin cotherapy, these are considered barbaric today. And they are, they, they did cause tremendous harm while they were still being used. But I think there tends to be an assumption today that all psychiatrists back then were [00:25:00] uncaring or even malicious, and that the public universally rejected some of these extreme therapies. And there was this like deceit constantly going on,

EAU: Yeah.

EW: Do this thing to you and I'm not gonna tell anyone about it because I don't want them to know. And the if the public knew they would hate this, that's not. Really the case and true. There were some psychiatrists that saw their patients as less than human, and there was a general sense of paternalism that underlaid all of medicine. You know, I know what's best for the patient. The patient doesn't need to know this. This is my decision.

EAU: Mm-hmm.

EW: We don't need to excuse the lack of informed consent or refrain from, from judgment about this paternalistic attitude. I'm not saying that like putting something in historical context does not mean that we have to just give it a pass.

EAU: Right. We don't have to excuse it.

EW: Right. It just what I am. What I think though is helpful is understanding where it fits in. Many patients and their families were desperate for relief and requested therapies that brought hope, things even like lobotomies, knowing that they were dangerous or painful or profoundly life altering. There weren't really alternatives at the time that had been found to have any success. And the world of psychiatry was not all on the same page. When it came to these somatic therapies. Many psychiatrists or psychologists distrusted them and felt that psychological interventions like psychotherapy was really the only viable treatment. And remember, ECT was developed because Cerletti wanted to find a better alternative, a safer and more tolerable alternative to the existing shock therapies. Was he compassionate or uncaring? Was he reckless or was he

visionary? Was he all of those things? You know, the, the development of ECT happened decades before antipsychotic or antidepressant drugs were developed. And so the only medications that were available at the time were sedatives, which aren't meant for long-term management or actual therapy, any sort of improvement. They didn't relieve symptoms. So you combine this with the overcrowding that happened in psychiatric institutions in the 1940s and fifties. I read about one hospital, Aaron in Georgia that had patient loads ranging from 600 to 1000. Isn't that

EAU: Ooh,

EW: unbelievable?

EAU: that is, yeah, that's not, that's not, no one's getting

EW: No, no one's getting, no, no, not even a little bit. And so there was a real sense of desperation the continued seeming lack of progress was like, we can't, we have to keep doing something. And so when ECT came on the scene, it was quickly and widely adopted, seen almost as a miracle solving the problems that other shock therapies had, and on the verge of revolutionizing psychiatry. And so it's, it's kind of ironic that now it carries such stigma and is falsely characterized as this outdated, divisive torture or mind control when early on it was seen as such an improvement. Such a big step forward. Psychiatrists whose long-term patients had their entire lives disrupted by mental illness, they leapt on ECT for the glimmer of hope that it provided and the results that it often delivered. And the last thing that I wanna mention about psychiatry during this time is diagnosis. Definitions, or criteria for many psychiatric conditions have changed over the decades in ways that are kind of difficult sometimes to articulate or quantify, would someone diagnosed with schizophrenia in 1946 be diagnosed with schizophrenia today, 80 years later? Maybe, maybe not.

EAU: Yeah.

EW: A whole book on the changing definitions of, of schizophrenia called the protest Psychosis, if anyone wants to check that out. But anyway, I think all of these things are important to keep in mind when understanding the differences between psychiatry then and psychiatry now. Again, we don't have to excuse it. And again, I, we, we shouldn't excuse it. This is all part of the history and it's part of understanding where we are today and why we are here today with this situation.

EAU: Yeah.

EW: part of it.

EAU: to

EW: How we got to be here. Yeah.

All right. So I left off with Cerletti publishing his ECT results, which led to pretty widespread and rapid adoption of this therapy into psychiatry practice, not just in Italy, but around the world. By the 1940s, ECT has had made its way into the US where psychiatrists began to trial the therapy on a broader range of disorders beyond psychosis or beyond, um, schizophrenia. This is when it began to be used to treat effective disorders like depression, where it led to. More improvement than it had shown in schizophrenia. And so this meant that over time, schizophrenia became less often an indication for ECT.

EAU: So interesting.

EW: Uh, yeah. So like the [00:30:00] logic behind the development of this therapy was like, well, I guess this isn't, this isn't true. So, but it, but it seems to work in other ways.

EAU: work for other things or for other reasons. Yeah.

EW: Right in the first few years, news of the therapies effectiveness mostly spread through case reports or word of mouth. Since standardization was not yet worked out and while many case reports were tinged with like a bit of defensiveness or hesitation, probably just because the sense of somatic therapies overall, there was like a, we shouldn't do this, these are not helpful. most psychiatrists though enthusiastically embraced this new technology by 1941, which is only three years after Cerletti's first experiment, 42% of psychiatric hospitals in the US had ECT machines.

EAU: Wow.

EW: Yeah,

EAU: Quite fast.

EW: fast.

EAU: Quite a good market to be in if you're making these machines.

EW: Oh, a lot of them made them themselves doctors or designed them themselves. Yeah, so this is where we needed some standardization.

EAU: oversight

EW: Actual oversight. Yeah. And, uh, and so yeah, like it is, it seems incredibly fast and it is, and I think there are a couple things that help explain it. So number one, ECT was seen as a modified version of existing shock therapies. And so the barrier to entry was lower. It was like, here's a new antibiotic as a bad parallel, you know?

EAU: I get it though. Yeah, it works.

EW: Um, for two, many psychiatrists were desperate for a therapy that helped, especially for their chronic severely ill patients whose life. Have been, had been profoundly altered by mental illness, and number three, ECT was not seen as the sole therapy, but as one component of someone's road to recovery, which also included necessarily psychotherapy.

EAU: Hmm.

EW: Number four. Uh, this was the, I've got one more after this. It seemed effective, particularly in treating effective disorders. Some patient testimonials or, or case reports were glowing. Others were more restrained in their praise. But overall the message was, was clear. This is worth trying.

EAU: Yeah.

EW: Though, a big part of the rapid adoption of ECT was that there were fewer patient protections during this time. There was no informed consent, there was no requirement for extended trialing. It was just kind of a let's give this a go. And that this aspect would end up playing a big role in the growth of mistrust, not just when it came to ECT, but psychiatry more broadly.

EAU: Not surprising.

EW: Not surprising, it's really not. As ECT grew in popularity over the 1940s and into the 1950s, its application became more honed, both in terms of indications, like when it was used for which conditions, how to administer it, and safety with more and more psychiatrists, including anesthesia and muscle relaxants, which became standard of care, I think by the late 1950s.

EAU: Hmm.

EW: And although it had been recommended as early as the 1940s for anesthesia at least, yeah. Tell me what was that? Does that surprise you? Okay. Okay. Okay. Um. And so, and with this rise in its use, there was a corresponding rise in public awareness of the practice. The 1948 movie, the Snake Pit, which was based on the book by the same name, features the main character undergoing ECT as a therapy, like as an actual treatment. And she does improve a bit and experiences some memory loss, but the scene is accompanied by scary music and she's, you know, talking about how she's afraid of, of getting electrocuted. And the real cure comes in the form of talk therapy, like ECT is portrayed as a shortcut. This first portrayal of ECT, which leans positive over. Overall, particularly in comparison with with later depictions, it stands in sharp contrast to these other movies where ECT is almost universally shown as quote, a brutal, harmful and abusive maneuver with no therapeutic benefit. That was from a paper on ECT in the media.

EAU: Yeah.

EW: These portrayals of ECT in popular movies, TV shows and video games has no doubt played a huge role in how misunderstood the therapy is today. But where did this bad reputation initially come from? What's fact and what's fiction? By the mid 20th century, ECT had become a well-established practice at psychiatric institutions, but it wasn't always used therapeutically. For example, in some cases it was used to try to quote unquote, cure homosexuality or treat hysteria. Not commonly, not very often, but it did happen. And today we don't consider these to be diseases, but at the time, they were seen as needing intervention to restore someone to their social role as defined by the time. But there are, yeah. Yeah. This is,

EAU: [00:35:00] This

EW: and, un it's a necessary part of the history of psychiatry. Yeah.

EAU: I mean, and I think that this, uh, yeah, there's, there's so much in the history of psychiatry that makes you go, yeah, it makes sense why people don't trust

EW: Absolutely. Absolutely. Yeah. Yeah. And there are, to add to that documented insti instances where ECT was used to control or subdue patients or as punishment, you know, like there was a, you're gonna put on the shock list if you misbehave and according to one account from the 1940s quote, "the

amnesia and disorientation produced in these patients by the shock treatment keeps them quiet and prevents their disturbing or hurting the other patients and upsetting the ward routine." End quote.

EAU: God. Upsetting the ward routine.

EW: And this, this was not universal policy across institutions. Many used ECT for clinical purposes alone, but it did happen. Particularly in those institutions that had fewer resources, which tended to house more marginalized or low income groups, already vulnerable populations harmed by those that were supposed to be their caretakers, their caregivers, and it wasn't just ECT that was used, right? Institutions that committed such abuses used a wide repertoire of tactics to instill order on the wards. Even though it wasn't every facility doing this, when these abuses came to light beginning in the 1950s, sixties, and so on, it caused an enormous amount of justified outrage and mistrust. For some, it called into question whether the goal of these institutions and psychiatry more broadly was therapy or control. And it certainly exposed the weaknesses and the in the care system that allowed these abuses to happen as a reaction to this, along with a growing rejection of authority overall during this period, a movement began the Antip psychiatry movement. Now many proponents of Antip psychiatry, I'm painting with the very broad brush here, but they claimed that mental illness was not real. So it was like one extreme belief. It was had no biological basis of whatsoever, and that psychiatry solely existed as a form of social control. Again, an extreme view, but there was a lot of sort of close to that.

EAU: Right.

EW: Conformity or adherence to social norms was rewarded while deviance was seen as pathological. This movement grew hugely influential, and its reach was extended through movies like One Flew Over The Cuckoo's Nest, which was released in 1975. And if you haven't seen it, I know we've talked about it a few times, you can't talk about the history of BCT without talking about this movie.

EAU: no.

EW: But the basic premise is that Jack Nicholson's character fakes a mental illness to avoid jail time, and then at the institution is punished with ECT and ultimately lobotomy at this hospital for his non-conformist ways. So these themes very much are in line with the Antip psychiatry movement madness as a form of protest. Somatic therapies like ECT used as punishment, the purpose of

psychiatric facilities being to house rather than help social undesirables. These claims or accusations made by the Antip Psychiatry movement were painted with a very broad brush and they inflicted great harm on the field of psychiatry, as well as patients whose conditions prevented them from living the lives they wanted. It also promoted stigma against mental illness, and it sowed the seeds of mistrust soared towards psychiatry broadly. Popular media like Cuckoo's Nest, misrepresented how ECT was currently carried out when the film was released. At the same time, the Antip psychiatry movement was a reaction to real abuses that had been committed.

EAU: Yeah.

EW: Ken Kesey, who was the author of the book, one Floor Over the Cuckoo's Nest, worked at a state psychiatric hospital where he may have witnessed punitive or coercive use of therapies like ECT. And like I mentioned earlier, psychiatric therapies including ECT had been employed to treat, quote unquote, treat what were once viewed as illnesses defined by their deviation from expected social norms, like not wanting to be a housewife or wearing clothes of the other gender. Which we right this, these practices, this mindset, we rightfully view with horror today.

EAU: Right.

EW: But the dismissal of psychiatry by the Antip Psychiatry movement as a form of social control is, misguided because psychiatry is not unique in seeking to return people to the lives that they want to live. That's essentially the goal of all of medicine, and it's often how we define who is sick and who is well. A broken leg keeps you from working or parenting the way that you want. Severe depression can also do the same. Social roles are constantly evolving and medicine has evolved [00:40:00] alongside redrawing those lines between sick and well over and over again. And so what is so important I think, is to consider the goals of the patient, what they would view as successful treatment, or what a return to normalcy looks like for them. But historically the patient's desires, wants, goals weren't necessarily, or were rarely included in this decision making process and how we measure treatment success.

EAU: Right.

EW: At the same time, the Antip psychiatry movement in its fervor didn't weigh patient experiences or considered the undeniable existence of severe mental illness that did change with psychiatric treatment. And so ECT as well as other somatic therapies came under fire. Usage of ECT decreased quite a bit

throughout the 1960s and 1970s, in part due to this movement, but also because of the increasing availability of pharmaceutical interventions that were easier to administer and carried less stigma. The legacy of this anti-psychiatry movement is more, is more than twofold, but I'm only gonna mention two things here. Because in the context of ECT, one is the negative portrayal of psychiatry in so much media that has had lasting damage on trust in medicine. And two is that it did force a reckoning of the field as a whole. Many psychiatric facilities shut down entirely. Safety laws and regulations were were developed and put into place, which were really important. And a lot of these early therapies were held. They were scrutinized. No somatic therapy that dated from the early 20th century held up to this scrutiny or rigorous controlled trials except for ECT.

EAU: ECT. Hmm.

EW: And so as strange as it sounds, the anti-psychiatry movement, in a way strengthened support for ECT because it forced more studies on the safety and the efficacy of this therapy. It forced it to defend itself

EAU: Right.

EW: and, and it did so, right? The fact that it still exists. The only major somatic treatment developed before psychopharmacology came into its own. Its testament to its efficacy and safety. And the ECT that we use today and the way the, that we administer it today is far removed from Cerletti's early trials, far removed from what Jack Nicholson's character underwent in Cuckoo's Nest. Since the 1950s, muscle relaxants and anesthesia became standard of care in many places, and informed consent was adopted beginning in the 1970s, but which is still later than

EAU: Know,

EW: it's un It's uncomfortably late. Yes.

EAU: Yeah.

EW: But the image that many people have of ECT today is a distortion of historic, real historical abuses that have been amplified by popular media hitting on a very understandable fear of vulnerability in a medical setting.

EAU: Yeah.

EW: So these fears have a basis in reality. They have a basis in history and they have been preyed upon by, you know, exciting media and exaggerated, but it's all part of the history,

EAU: Yep.

EW: all parts of it.

EAU: is all real and it is exaggerated and it is valid, and it is helpful and it has side effects. It's everything,

EW: it's not representative of today and yeah. Yeah.

EAU: have to like be able to hold all of these truths

EW: Yes.

EAU: all part of the truth.

EW: So beginning in the 1980s, ECT began to increase in use again, thanks in large part, to patients publishing, personal memoirs, describing their experiences. Celebrities like Dick Katt and Carrie Fisher talked positively about their experiences with ECT and finding relief. Uh, there was a memoir by psychologist Norman Andler titled Holiday of Darkness, and this was pretty instrumental in sort of the, the re-imagining of ECT. The, the rebranding of ECT. He had as a student, observed unmedicated ECT in the 1950s. And he was horrified by what he saw. What he heard. He was like, this is awful.

EAU: Yeah.

EW: But when he struggled with severe depression later in life and felt out of options, he reluctantly turned to ECT and made a full recovery. And so he wrote a book that kind of described this.

EAU: Interesting.

EW: These testimonials serve to demystify the therapy and raise awareness when they weren't drowned out by the continued misrepresentation of ECT in media. But they also demonstrated often this mixture of emotions, not solely positive, like there was the positive there, but it was more bittersweet, right? There was relief, there was recovery, but there was also sometimes memory loss

and a questioning of like, am I the same person? And Erin, I know next week you'll get into side effects in much more detail. But I would be remiss if I didn't [00:45:00] mention memory loss. So from its earliest use, physicians recognized that ECT was associated with memory loss or difficulty forming memories for some patients. For most people, it was temporary. According to studies examining memory loss after ECT conducted more recently, long-term impacts are rare. But it's hard to measure cognitive impact, and some people don't feel that their experience is adequately captured by this research, and they report longer lasting memory loss that persists even after treatment cease. And then this is like another HU Can of Worms, but there's social media sharing of stories and there's sort of this like, it's not even a U-shaped review curve where it's like only one stars and five stars. People tend to share negative experiences online. And so is that amplifying these outcomes or is it, is it demonstrating something that these studies aren't capturing?

EAU: that that's being missed.

EW: Right. And I, I mean, what it comes down to is that experiences with ECT, like many other psychiatric interventions, they're not one note. They're not easily conveyed with a sentence or two or like a one to five star rating. And so where does this leave us today? The bottom line is that we need more transparency and awareness. ECT can be a life-saving therapy. It might not be the right fit for everyone, but one of the biggest barriers for people even considering it as an option is the stigma and misinformation that has hounded ECT since the 1960s. And the challenge that we're faced with today is countering this misinformation, de-stigmatizing this therapy, while also communicating honestly about the potential benefits and drawbacks of ECT, which is what I know we'll get into more next week. And so with that, um, sources, that's all I've got on ECT.

EAU: Erin, I loved it. I learned a lot.

EW: Good. Good. So did I.

EAU: more.

EW: Yes. Um, many places, so I read a great book for this by Jonathan Sadowski from 2016 titled Electroconvulsive Therapy in America, the Anatomy of A Medical Controversy. It was really, I really appreciated this perspective because it felt very even handed in terms of going into the history of abuses

EAU: Right.

EW: Well as like. The, the, the history of like, well, it's still here, it's still, it has proven itself. How do we, where do we go from here? So the nuance, the ambiguity, excellent. Loved it.

EAU: Oh, you know, we love

EW: We do. Um, and then if you would like to check out some information about how ECT is portrayed in popular media, there is a paper from 2016 called Representations of ECT in English Language, film and Television in the New Millennium by Matthews, et all. It's, it's interesting. It's interesting.

EAU: I like it.

EW: But yeah, that's all I've got. Um, thank you again so much to the provider of our firsthand account. It really, it does, like we said, it means, it means the world.

EAU: Yeah, we don't, we don't have enough good words to express it, but it's like so meaningful that you would share your story with us. With everybody listening and watching,

EW: Yes,

EAU: thank you.

EW: thank you. Thank you also to Blood Mobile for providing the music for this episode and all of our episodes.

EAU: Thank you to Lianna and Tom and Mark and Pete and everyone else. I'd exactly right for making all of this podcast possible.

EW: Yes. Thank you. Thank you. And thank you to you listeners for listening, for watching. Let us know what you think.

EAU: And make sure that you're subscribed so that you don't miss next week's episode. 'cause there's a lot more to cover when it comes to ECT,

EW: that's correct.

EAU: et

EW: Oh, yeah. Oh yeah.

EAU: And a special shout out as always, to our patrons for your support over on Patreon. It means so much to us. Thank

EW: It does. It does. Until next time, wash your hands.

EAU: You filthy animals.