The impact of the 1960s and 1970s on the ethical evolution of Electroconvulsive Therapy considering its wide sociopolitical scope.

## **ABSTRACT**

This paper outlines the impact of the 1960s and 1970s on the ethical evolution of Electroconvulsive therapy, considering the scope of its wide socio-political impact. It examines 3 core cases of ECT throughout the 1960s and 1970s from all around the world, namely the United States, the United Kingdom, and Australia. By comparing each case to modern procedure, this paper shows the social, political and ethical evolution of the treatment. Each case is evaluated based on its background, procedure, ethics and patient perspective. Events that acted as catalysts in the development of ECT, such as the Anti-Psychiatry movement, the Milgram experiment and the presence of ECT in pop culture, are also discussed. Overall, ECT is a far cry from what it was before, and although there is a lot of stigma still surrounding the treatment, patients have seen it transform their lives. With new ethical practices, support groups, major procedural changes and proper treatment plans, the side effects of ECT have drastically decreased and its benefits have skyrocketed.

### A BRIEF HISTORY OF ELECTROCONVULSIVE THERAPY

The ancient Romans used electric fish to treat their headaches, inherently acknowledging the use of electricity to treat pain and heal the body. The eighteenth century saw research by Benjamin Franklin in the field of electricity, hinting at its possible applications in medicine. Franklin's Kite experiment in 1752, proving that lightning was also a form of electricity, and his work developing the core principles of electrical flow, changed our perception of the natural forces, setting the stage for the practice of electroconvulsive therapy. Paracelsus, one of the early pioneers of treatments using camphor, along with Leopold von Auenbrugger (1764), Dr. Oliver (1785) and Weickhardt (1798) demonstrated that the use of camphor to treat mania was indeed effective. Also in that time period, Luigi Galvani's discovery of animal electricity in 1791 revealed that muscles would rhythmically contract with the application of electricity. His work therefore, created a vital link between physiology and electricity. Together with the invention of the first real battery by Alessandro Volta in 1800, the use of electricity in medicine really began to develop. In 1851, Dr Szekeres advocated for a calculated increase in camphor that would allow patients to experience effects like seizures to improve their mental state. It was in 1927 that Julius Wagner-Jauregg discovered that a high fever could reduce the symptoms of the mentally ill from there Laszló Meduna's Research led him to hypothesize the antagonism between schizophrenia and epilepsy. In 1931, Hechst, a colleague of Meduna, supported his hypothesis by finding less glial cells in schizophrenia patients. In 1934, Meduna conducted his first human trials using intramuscular injections of camphor to induce seizures. Over the next two years, he conducted trials with 100 patients, with 50% showing a large improvement, but in 1936, camphor was replaced with intravenous cardiazol to allow for easier seizure induction. Brutal side effects of cardiazol and Metrazol led Italian neurologist Ugo Cartelli to discover Electroconvulsive therapy in the 1930s. He used electricity on his patent to hopefully reduce the symptoms of his mental illness. With goals to replace unreliable methods, like the chemical agent Metrazol that had brutal side effects, he was the man to start it all. After Cartelli, the 1940s and 50s saw a

good amount of success with ECT. It was a developing procedure and although it was conducted without muscle relaxants until the late 1950s, studies conducted clearly demonstrated its effectiveness with patients unresponsive to psychiatric medicine. The 1960s and 1970s saw a major decline in the use of ECT. This was not only due to the development of better psychiatric medication but also because of the lack of ethical practices while conducting the procedures. "Public representations of ECT in the 1960s and 1970s were dominated by negative images," and ECT in that time was characterised by "spasms, fits, shock, coma, and shame". That being said, there was also a lot of research conducted on unilateral electrode placement to reduce the side effects of memory loss that were very potent at the time. The American Psychological Association tightened its ethical guidelines in 1978, and the Antipsychiatry Movement further steered people away from undergoing ECT because of its negative ethical associations. The 1980s and 90s saw a resurgence in ECT treatments. Norman Endler's book The Holiday of Darkness, published in 1982, was one of the first positive experiences written about. In his book, he expressed his dislike of a treatment being a medical professional; however, at the end, he talks about how ECT saved him from depression, making his account very impactful. Ethical issues and side effects of memory loss were still very much present, but further research on possible modifications to ECT allowed for it to be viewed in a much better light in the 2000s. From there, ECT has gotten so much better not only procedurally but ethically and socially. It has saved many lives, and while modifications to the treatment are still vital, electroconvulsive therapy has undoubtedly come a long way.

## ASTON HALL - UNITED KINGDOM

# **BACKGROUND**

Aston Hall was originally a Red Cross hospital located in Derbyshire for soldiers injured during World War One; however, after the Mental Deficiency Act 1913, 1926 saw Aston Hall as an institution for 'delinquent' children. Later, during the 1960s and 1970s, Aston Hall was recognized as a treatment center for children under the authority of Dr. Kenneth Milner, who was employed between 1947 and 1975. "Dr. Milner was seen by many as a kind and caring professional who was innovative in his practice and provided solutions that would improve the lives of children." Hence, no one opposed or challenged his authority at Aston Hall. It was later revealed that he was responsible for the torture of thousands of children at Aston Hall. Not only were these children sexually abused by Dr Milner, but they were also injected with narcotics like sodium amytal that had long-lasting effects on their physical and mental well-being. Another almost undocumented part of the horrors of Aston Hall was the electric shock treatments that these young girls were forced to endure. Most parents did not believe their children about Aston Hall simply because of the absurdity of the situation. Medical records were also supposedly lost in a flood, and unfortunately, by the time Barbara and other survivors came forward, Dr Miller had already passed away with no legal repercussions.

## **PROCEDURE**

Barbara O'Hare, a survivor of Aston Hall, talks about the fear of Dr. Millner's electric shock treatments and how these treatments were used as a weapon of control and as brutal punishment for the girls being "bad." Her book 'The Hospital' sheds light on what her experience there was actually like. "You'd better calm down, or you will end up having electric shock treatment," said a nurse to Barbara. Barbara was also

threatened with the treatment and came very close to experiencing it. "You have been a very bad girl, just like the others, but Dr. Milner is going to cure you. He'll cure you of your badness." Dr Milner will arrange electric shock treatment." It's where they put a metal hat on your head and connect it to the electricity. Then they put electric shocks through your brain. They do it again and again, and they don't stop until your behavior improves." Hearing this at just 12 years old caused Barbara to go "rigid with fear" and reach out to another girl on the ward, Christina. To find out more about the treatment. Cristina told Barbara about how Dr. Milner had shaved off all the girls' hair before treatment because of the "static" the strands had caused; she talked about what had happened to the girls who had gone through the treatment, too. "It makes them crazy. Afterwards, they lose their memory and their hearing. All they can hear is the buzz of electricity ringing in their ears." They never talk again. They spend the rest of their lives in a wheelchair." Furthermore, she also talked about the state of this one girl she knew at Aston Hall after experiencing this horrific treatment. Christina "saw her briefly afterwards. All her hair had been chopped off, and she was just sitting there in a wheelchair, her mouth hanging wide open with dribbles of spit hanging from it. She never spoke again." After hearing this from her dear friend at the ward, Barbara was very fearful and vowed to be as good as she possibly could to avoid the horrors of Milner's treatment.

### WITNESS TESTIMONIES

There are no survivors of Dr Milner's electric shock treatments. The girls who managed to survive Aston Hall and talk about what happened only raised complaints about the sexual and chemical assaults they were subjected to. Those who went through ect there were unable to talk, held captive by insanity caused by the ECT or passed away before they were able to stand up for themselves.

# **ETHICS**

- 1. Responsibility to Participants Aston Hall severely abused these guidelines. Patients were physically and psychologically harmed and it caused long-term distress to them.
- 2. Informed Consent- Dr Milner did not ask the parents or the children if they wanted to participate, nor did he explain the procedure.
- 3. Deception & Debriefing- Deception was largely accepted at the time, and Dr Milner decided that the parents as well as the children. However, he did not debrief them after their treatments.
- 4. Confidentiality & Privacy Dr Milgram did respect this one. All the records of his treatment were lost, and he did not reveal what he put those children through.
- 5. Risk vs. Benefit Justification- It was argued that, if the benefits of the research outweigh the risks, some harm was acceptable.
- 6. Right to Withdraw Dr Milner did not allow any of the children from the ward to refuse treatment.
- 7. Special Considerations for Vulnerable Groups- Children on the ward were not treated with care nor special ethical considerations.

## MKULTRA - UNITED STATES AND CANADA

## **BACKGROUND**

Project MKULTRA's main aim was to devise methods of controlling human behavior and human impulses. With a "secret arrangement" with the CIA, 10 million US dollars were obtained for this project. Between the years 1953 and 1964, MKUltra conducted a minimum of 149 sub-projects, including "single subprojects in such areas as effects of electroshock," along with the administration of harmful drugs,

therapies, and even behavior modification. The scientists wanted to test if ECT could influence behavior and help interrogate subjects. Over the ten-year life of the program, many 'additional avenues to the control of human behavior' were designated as appropriate for investigation under the MKULTRA charter, including electroshock. Threatened by the communists' "utilizing drugs, physical duress, electric shock, and possibly hypnosis against their enemies," the CIA decided to test if they could administer ECT as a form of psychological warfare.

### **PROCEDURE**

These operations took place "with specialists in universities, pharmaceutical houses, hospitals, state and federal institutions" supervised by an intelligence community to ensure a controlled environment for treatment. Electrodes were attached to the participant's bodies, and images were flashed on the screen. Those who administered ECT were also forced to consume a host of drugs before and after ECT. It was later revealed that most of these experiments were also conducted "covertly "on unaware US citizens. Prisoners of war from China and Korea were also experimented on. The "1963 Inspector General report on MKULTRA" clearly states that some electroshock experiments were conducted without obtaining informed consent from the subject. However, MKUltra's roots were geographically more extensive than just the United States and reached Canada when the CIA recruited Donald Ewen Cameron, a Scottish psychiatrist. They took an interest in his psychic diving technique, where he aimed to cure schizophrenia by reprogramming patients' mental states and erasing their memories. Paid sixty-nine thousand US dollars; it was at the Allan Memorial Institute in Canada where Cameron administered shocks to patients over "thirty to forty times the normal power. "In many cases, the patients who received ECT were not even schizophrenic, having minor issues like anxiety or depression. Those patients who survived his treatments had severe memory loss, forgetting their names and their parents. When investigating Project MKUltra, the Inspector General found that essential requirements of Wilson's 1953 memorandum had yet to be followed entirely. Volunteers were not fully informed, as required, before their participation and the methods of procuring their services. In many cases, it appeared not to have been in accord with the intent of Department of the Army policies governing the use of volunteers in research." So, eleven thought that their interrogators were their mother and father. In 1963, the CIA began to wrap up the project, which was finally terminated in 1964.

## WITNESS AND PATIENT TESTIMONIALS

"Dr. Greene had electrodes on my body, including my head. He used what looked like an overhead projector and repeatedly said he was burning different images into my brain while a red light flashed aimed at my forehead. In between each sequence, he used electroshock on my body and told me to go deeper and deeper, deeper. While repeating each image would go deeper into my brain, and I would do whatever he told me to do. I felt drugged because he had given me a shot before he started the procedure".- DeNicola, a girl who became involved with the CIA at just four years old. "DeNicola had to go to therapy for 12 years as she described herself as having multiple personality disorder and experiencing constant mental, physical, and emotional pain."

"His hospitalization lasted for three months until June 19, 1956. During this period, for the first time, my father was subjected to the more extreme measures that have been described. By the end of the hospital stay, he had received fifty-four days of continuous sleep in partial sensory isolation; at least twenty-three electroconvulsive treatments (ECTs); psychic driving had begun, and depatterning to a state of complete

regression was achieved. He developed bronchopneumonia from the continuous sleep and his blood pressure was so low that it had to be propped up artificially with medication."

Rita Zimmerman: "Given 56 days of 'sleep treatment' and 30 electroshock treatments between July 3 and September 22, 1959, to the point where she was so depatterned, Cameron noted she had become 'incontinent of stool on occasion."

"I don't want to go back," he said. "It's not doing me any good. All they do is give me shock treatments and drugs. I hate it. Cameron never talks to me. I can't breathe. I'm afraid that I'm going to die."

### **ETHICS**

- 1. Responsibility to Participants MKULTRA severely abused these guidelines. Patients were physically and psychologically harmed and it caused long-term distress to them.
- 2. Informed Consent- Consent was obtained in some cases; however, participants were not properly made aware of the consequences and true nature of the procedures.
- 3. Deception & Debriefing- Deception was a huge part of the project, MK Ultra. From not revealing the aim of the experiment to not disclosing the procedure, deception was the root of this project. Additionally, debriefing was also not done.
- 4. Confidentiality & Privacy All patient records were kept confidential.
- 5. Risk vs. Benefit Justification- The risks taken were not justified as very little is known about the benefits of the research from this project
- 6. Right to Withdraw No patients were allowed to withdraw despite their protests.
- 7. Special Considerations for Vulnerable Groups- Children subjected to the treatment were not treated with care nor special ethical considerations.

# CHELMSFORD PRIVATE HOSPITAL

# BACKGROUND

Chelmsford Private Hospital, located in Pennant Hills, Sydney, was originally a house. In 1963, it converted to a geriatric hospital that was legally allowed 15 beds and a cot. No more than 3 months later, it was declared as a hospital exclusively for "Deep sleep therapy" primarily conducted by Dr Bailey, expanding to a 40-bed hospital in 1971. Previously working as a research chemist and a pharmacist, Dr Bailey acquired an interest in deep sleep therapy after curing a young woman with it as an intern. Psychiatrist Dr Harry Bailey treated her on multiple occasions with deep sleep therapy and electroconvulsive therapy (ECT) but her last was in August 1979.1 More than 1400 deep sleep treatments were administered to 1115 patients in Chelmsford Private Hospital At Chelmsford Dr bailey combined Deep Sleep Therapy with Electroconvulsive therapy and chemicals such as Tuinal, Neulactil, Sodium Amytal, Placidyl and Serenace; all were restricted substances.

## **PROCEDURE**

Patients were placed under prolonged drug-induced comas using heavy doses of sedatives and barbiturates. Once sedated, they were restrained, often shackled to their beds, and left largely unattended for extended periods. During this time, they were completely dependent on staff for every physical need. Naso-gastric tubes were inserted to deliver liquid nutrition, a process many patients recall as deeply distressing. They described choking as the fluid passed down their throats, and some attempted to rip the tubes out due to unbearable discomfort. Patients were semi-conscious at times, trapped between sleep and

wakefulness, unable to move or speak but acutely aware of their surroundings. While in this sedated or semi-conscious state, patients were subjected to repeated rounds of ECT without consent, anaesthesia, or muscle relaxants. Witnesses recalled that Dr. Herron administered ECT directly in the sedation wards. During these sessions, patients' bodies convulsed violently, and nurses were told to hold them down and keep their jaws lifted to prevent airway blockage. The experience was described as torturous. Patients reported sensations like burning metal pressed to their temples and a terrifying sense of dying. Some screamed and begged for the electricity to stop, but the procedure continued. In several cases, patients had explicitly withdrawn consent or crossed out the words "electrotherapy" on forms, yet ECT was still performed. Others were never told they would receive ECT at all. Nurses administered large doses of sedatives without direct supervision from a doctor, reflecting a complete lack of medical oversight and ethical control. During the sedation period, patients frequently suffered severe physical complications. Many experienced pneumonia, respiratory distress, bedsores, vomiting, aspiration of stomach fluids, dangerously low or high blood pressure, and cyanosis, where their skin turned blue from lack of oxygen. Some developed distended abdomens and bladders, while others experienced high fevers or cardiac arrest. Despite these alarming symptoms, treatment often continued. As patients began to regain consciousness, a stage referred to as "lightening out" of DST, they experienced intense hallucinations and delirium. One patient described seeing people with their arms cut off and blood spurting across the room. She hallucinated rats crawling on the floor and imagined her children being taken away. Many emerged from DST confused, disoriented, and unable to walk or bathe without help. Weight loss was common, and some experienced convulsions or seizures during recovery. The consequences of DST and ECT extended far beyond the hospital stay. Many patients continued to suffer long-term neurological and psychological problems. These included short- and long-term memory loss, changes in personality, anxiety, depression, sleep disturbances, learning difficulties, migraines, and chronic confusion. Several described feeling that the treatment had erased a part of their life, leaving them permanently altered.

### **TESTIMONIES**

"Barry Hart was sedated with near-fatal doses of barbiturates, and while in a drug-induced coma, was given electric shock treatment on six occasions without his consent. His respiratory rate rose from 16 breaths per minute to 150. His temperature peaked at 39.9 [degrees Celsius]. He became incontinent, cyanosed and went into shock." What was missing was just as critical as what was there: there was no signed consent form for shock treatment, and the bottom part of the admission slip had been cut off. The files reinforced what Barry knew was the truth: he had not consented to being sedated and given shock treatment."

He remembers patches being placed on his head on several occasions, with great bolts of electricity zapping him through the patches. Mr Finn felt like he was dying, and each time he was zapped, his mind and body went into a great painful darkness." After he was discharged, his anxiety was worse, and he had panic attacks. "For many years after his treatments at Chelmsford Mr Finn suffered debilitating panic attacks, which were brought on by the memories of receiving ECT. The panic attacks were so severe that it would take Mr Finn months to get over them, during which time he could not work. Mr Finn also has quite bad memory loss. Mr Finn stated that a large part of his life was taken away because of his treatments at Chelmsford, and it is only with the help of his family and friends that he has been able to recover."

"Alan Field crossed out the words "electro therapy" on the consent form, yet was administered ECT by Mr Herron. In the next admission, staff noted that Mr Field did not appear to know he had previously

received ECT and spoke of Mr Herron's vitamin injections inducing frightening yellow lights. On 19 March 1977, Mr Field demanded that he have no more ECT, yet Mr Herron administered ECT to him on 21 March. On 22 March, staff noted that Mr Field thought he had had his last ECT; however, Mr Herron administered another ECT the following day."

## **ETHICS**

- 1. Responsibility to Participants These guidelines were not respected at Chelmsford Hospital. Patients were physically and psychologically harmed, which caused long-term distress to them.
- 2. Informed Consent- While consent was obtained in some cases, it was not informed
- 3. Deception & Debriefing- Deception was largely accepted at the time, and patients were heavily deceived with doctors faking the need for ECT in the first place. Debriefing was not done.
- 4. Confidentiality & Privacy This guideline was respected, with no patient records being intentionally leaked.
- 5. Risk vs. Benefit Justification- It was argued that, if the benefits of the research outweigh the risks, some harm was acceptable. In this case, I believe that the ends don't justify the means.
- 6. Right to Withdraw No patient was allowed to withdraw from treatment despite clear protests to stop
- 7. Special Considerations for Vulnerable Groups- Children, nor any other specialist groups, were spared or treated with even a little more care.

### MILGRAM EXPERIMENT

## **BACKGROUND**

After witnessing the atrocities of World War two, Milgram, a Jewish scientist, wanted to investigate the extent to which an individual would obey an authority figure in an agentic state of mind. 40 innocent male subjects were forced to administer electric shocks to a victim (a trained confederate of the experimenter) using a simulated electric shock generator, with its voltage levels ranging from 15 to 450 volts.

### **PROCEDURE**

The subjects had no choice but to play the role of a teacher, and despite their desperate protests, leave the experiment. In summary, the subject (teacher) was given a list of words to ask the victim (the confederate). With each wrong answer the confederate gave, the teacher (subject) had to administer an electric shock that started at 15 volts but increased by 15 volts with each intentional wrong answer the student (confederate) purposely gave. Although the confederate did not experience any shocks, the participant could not see their face due to a one-way mirror between them. Hence, they assumed, by the simulated sounds of the confederate's pain being played, that they were causing the participants extreme harm.

## Below is the compiled data of Voltages administered

Voltage level	Range of Voltage	Maximum shock in volts that participants administered
Slight Shock	15-60	0

Moderate Shock	75-120	0
Strong Shock	135-180	0
Very Strong Shock	195-240	0
Intense Shock	255-300	5
Extreme Intensity Shock	315-360	8
Danger: Severe Shock	375-420	1
XXX	435-420	26

## **CONCLUSIONS**

- 1-65% of participants administered 450 volts of electricity
- 2- 14 participants stuck to their morels and stopped despite the commands: 5 after 300 volts, 4 after 315 volts, 2 after 330 volts, and 1 after 345 volts, 360 volts, and 375 volts respectively
- 3-The average voltage administered was 368V.

## MILGRAM IN TERMS OF MODERN ETHICS

Firstly, there was a lot of deception from the get-go. Participants were deceived and told that Milgram's experiment to test their obedience to authority was a memory test that did not inform them about all the psychological trauma they would experience. Some of the participants had experienced previous psychological trauma and displayed alarming signs of stress during the study but were still not allowed to withdraw. For example, participants were seen laughing nervously, shaking, expressing anger and digging their nails into their palms. Hence, they were not protected from harm by Milgram. 4 standardized prompts were used when the subject expressed concern for the learner's well-being, wanted to leave or was not administering the shocks as instructed.

# PARTICIPANT TESTIMONIES

- 1- "I was in this crazy situation... I was just gonna walk out of there... nobody was gonna shoot me or put me in a prison cell. I still didn't know what had happened. I was a basket case on the way home." Bill
- 2- "One of the girls in the office... said ...that [those who went to the end were] no better than the people who ran concentration camps during the war."
- 3- Let me out of here. That's it-let me out of here. My heart's starting to bother me now. Let me out of here, please!" -A subject with heart problems pleading to be let go

## MILGRAM'S EFFECT ON ECT AND ITS ETHICAL PRACTICE

<sup>&</sup>quot;Please continue/please go on."

<sup>&</sup>quot;The experiment requires you to continue."

<sup>&</sup>quot;It is absolutely essential that you continue."

<sup>&</sup>quot;You have no other choice, you must go on."

'Rachel had spent thirteen months in a mental hospital after the birth of a child and had volunteered for the experiment because she'd had shock treatment during her hospitalization and wanted to test her memory. She laughed nervously throughout the experiment, telling Williams, "I don't know why I'm laughing—it isn't funny," and apologized constantly to the learner as she delivered the shocks, proceeding to the maximum voltage. She told the group, "I did say when I came home that I would never again accept any of these experiments because I came here thinking I was going to learn something." Rachel's experience highlights the immense mistrust in psychologists and mental health professionals in Milgram's experiment. It also shows that the credibility of ECT as a reliable treatment has been significantly compromised. Many expressed concern about the way of treatment, and even the APA(American Psychological Association) knew there was a need for change. After the Milgram experiment, they made ethical principles much more rigid. Validate consent, the right to withdraw, and debriefing had become vital to psychological experiments. In response to the Milgram experiment, Schrag perfectly summed up the future aims of psychological experiments in his quote, "We can talk about what we can learn from that experience and how we might answer important questions while respecting the rights of volunteers who participate in psychological experiments."

## ANTI-PSYCHIATRY MOVEMENT

The anti-psychiatry movement that began in the 1960s and 1970s acted as a catalyst for change, powered by mental health professionals, patients who had suffered, and people who demanded a change in the treatment of the mentally ill. It was driven by the criticism of institutional authorities, the fight for civil rights, and personal freedom. It particularly focused on treatments such as etc., and it paved the way for its success today. Several key individuals, such as Thomas Szasz, R.D. Laing, and David Cooper, highlighted the flaws embedded within ECT, which allowed future psychiatrists and doctors to work on them. Szas, a famous psychiatrist and writer of "The Myth of Mental Illness," viewed ECT as a coercive treatment that did not regard an individual's agency or rights. Keeping in mind ECT, he emphasizes that"The greatest danger of psychiatry is that it can be used as a tool of social control, to enforce conformity and suppress dissent." D.Laing, a British psychiatrist, commented on how impersonal and subjective the treatment of ECT was. He wanted the patient to actually talk about their experiences, and a consensual treatment plan to be discussed based on that. "The aim of therapy is not to cure the patient but to help them understand their experience and find their way to cope with it." David Cooper also wanted a more humane way to administer ECT. He emphasizes that antipsychiatry is not a rejection of psychiatry; it is a rejection of the way psychiatry has been practiced." Issues surrounding ect, such as lack of informed consent, the coercion of institutionalized patients into accepting the treatment, cognitive side effects, and lack of scientific protocols, we aggressively brought up during the movement. The antipsychiatry movement also talked about how ect in, in a lot of cases, was used as a pacifier that simply suppressed the underlying symptoms of a patient, hence not addressing the root cause of particular symptoms. The treatment was also seen to further aggravate symptoms and cause new traumas. This movement also played a vital role in the deinstitutionalization movement, pushing for the shutdown of numerous psychiatric institutions and the rise of community advocacy. This aimed to reduce the use of inhuman treatments such as ECT and focus on long-term ethical treatments instead. In conclusion, this movement raised awareness about ECT and validated the concerns of a lot of individuals. It emphasized the fact that ECT is not meant for everyone, and the pros and cons of the treatment must be properly discussed before choosing it as a course of action. Since this movement, ECT has witnessed an incredible amount of changes and is now used to successfully treat a variety of mental health conditions.

## ECT IN MEDIA AND LITERATURE

The fear of Electric shock treatments, caused by the lack of ethics and their inhuman ways, has found its way into Hollywood and popular books. For example, ECT is talked about in the novel One Flew Over the Cuckoo's Nest as well as the films Requiem for a Dream and The Return to Oz. Ken Kesey's novel One Flew Over the Cuckoo's Nest is depicted in a rather harsh and barbaric way. Through the eyes of the character of Randle P. McMurphy, who is subjected to ECT as punishment, we read about the torment he and the other patients had to go through. Later converted to a film directed by Milos Forman, the audience's already negative perception is only reinforced. Disturbing scenes of patients convulsing, shaking, and in pain only caused more fear of the treatment, portraying it as a form of punishment and a method of control for the doctors administering it. Darren Aronofsky's 2000 film adaptation of Hubert Selby Jr.'s novel portrays ECT symbolically and dramatically, contributing to the film's overall bleak and intense atmosphere. The treatment is shown as part of the downward spiral of Sara Goldfarb, whose mental and physical deterioration is central to the film's narrative. ECT is depicted as a desperate measure within a context of personal and societal failure, emphasizing the film's themes of despair and the destructive impact of addiction. The portrayal is more about illustrating the devastating effects on the character's psyche than about accurate medical representation. The 1985 film "Return to Oz," directed by Walter Murch and based on L. Frank Baum's Oz books include a fantastical and surreal depiction of ECT. In the film, ECT is used by the antagonist, Princess Mombi, in a visually striking but highly fictionalized manner. The treatment is depicted through elaborate and fantastical machines that serve more as plot devices than accurate representations of real-life ECT. The portraval is intended to contribute to the film's dark, fairy-tale atmosphere and is more concerned with creating a menacing visual effect than with presenting an accurate depiction of psychiatric treatment. In conclusion, each of these portrayals serves the respective narratives and thematic goals of the works, but does not necessarily align with the clinical realities of ECT, hence contributing to even more unnecessary fear towards electric shock therapy.

# ECT IN VIDEO GAMES

Research examining ECT shows that video games overwhelmingly depict ECT negatively, framing it as a violent, torturous, or coercive procedure rather than a legitimate therapeutic intervention. For example, BioShock Infinite situates ECT within a dystopian city as a tool of control and punishment, reinforcing themes of societal manipulation; Outlast—a survival horror game set in an asylum—portrays ECT as part of the institution's brutal and dehumanizing treatment methods; in Call of Duty: Black Ops, ECT is presented in the context of mind-control experiments, linking it to manipulation and loss of autonomy; and The Evil Within incorporates it as an instrument of fear and psychological torment, highlighting the procedure as inherently horrifying rather than therapeutic. Across these titles, ECT is rarely contextualized medically; instead, it is a dramatic device used to amplify horror, dystopia, or moral corruption. These portrayals are highly revealing of cultural anxieties surrounding mental health, institutional authority, and the dehumanization of psychiatric patients. They echo historical misconceptions and fears about psychiatry, while also interrogating themes of power, control, and the limits of human agency. Yet these representations also raise ethical concerns: video games, as immersive and influential media, shape public perception, often perpetuating myths and stigma that can dissuade individuals from seeking care or understanding mental health treatments accurately. The repeated depiction of ECT as torturous or punitive reinforces fear and misunderstanding, overshadowing its evidence-based efficacy for conditions such as severe depression or treatment-resistant mood disorders.

By bridging creative storytelling with accurate representation, games could transform from vehicles of stigma into platforms for awareness and deeper understanding, challenging audiences to confront the realities of psychiatric treatment rather than sensationalized fear.

## **ECT NOW**

# CONSENT PROCESS AND PRE ELECTROCONVULSIVE THERAPY PROCEDURE

Before ECT, consent is first and foremost. All Possible side effects of the treatment, procedure, reason behind the treatment and external medications required are explained in a detailed consent form given to the patient and their family, before they undergo the treatment. Patients are informed that their treatment will be performed by a licensed psychiatrist who specialises in Brain Stimulation. Since ECT requires general anesthesia, they are also told that they must avoid drinking and or eating before the procedure. Additionally, they must also consent to taking medications that regulate heartbeat, reduce oral secretion, relax muscles and render patients unconscious to keep them comfortable while undergoing ECT. Patients are informed that they should not make any life-changing decisions while undergoing ECT as well. Lastly, patients consent to a full physical exam to make sure that they have no other conditions that could hinder the treatment.

## ECT PROCEDURE

ECT takes place in a hospital treatment room. Sensors to monitor heart and brain waves are placed on the patients chest area and head. Additionally, a blood pressure cuff monitors blood pressure. Next, an oxygen mask will be placed over the patient's nose and mouth, and they will be put to sleep using anaesthesia. Two electrodes will then be placed on the patient's head, emitting a carefully controlled voltage of electricity. The placement of electrodes is subjective and is customised to best suit the patient's needs. There are 3 main categories

- 1- Bi- lateral ECT The first electrode is placed on the right side of the head, while the second is on the left.
- 2- Bi-frontal ECT one electrode is positioned above the outer edge of the right eye, while the other is positioned on the outer end of the left eye.
- 3- Unilateral ECT two electrodes are positioned on one side of the head, usually the right one. However, in rare cases, the left side can be used as well.

Once electrodes are placed, a small current will pass through the brain, eliciting a seizure. Only one controlled seizure is administered per session, and it is usually not more than a minute long. The muscle relaxants, previously administered, will keep the patient during this process, ensuring that they do not feel any pain. The Anesthesia wears off a few minutes after the patient has seized, leaving them unable to recall their treatment

### POST ECT AND SIDE EFFECTS

After a session of ECT, patients are taken to a recovery room, where they may feel nauseous, have a headache or experience sore muscles. With modern procedures and in very rare cases, patients may experience an Irregular heart beat, bone breaks, dental issues or muscle dislocation. In even more rare cases, patients may suffer from a cardiac arrest. Only 1 in 10000 of people undergoing ECT pass away. Some may even experience memory problems and memory gaps shortly after the treatment.

## **ETHICS**

Currently, almost all medical centres follow tight ethical guidelines when performing ect to protect not only the patients but also all the medical professionals involved. Most follow the ethical Guidelines given by the World Health Organization (WHO), World Psychiatric Association (WPA) or the psychiatry associations of their respective countries, as well as guidelines from their federal and state governments. At its core, the administration of ECT cannot be practiced without hospitals and medical professionals adhering to several ethical principles.

1. Autonomy - Informed consent is a must. All patients must be informed of all the risks, side effects, procedures, restrictions and alternatives when undergoing ECT. They should not be coerced into the procedure and should be told that they can withdraw from the treatment at any time (before, during or after the procedure)

Those who cannot provide informed consent (minors, those with impaired cognition or severe mental illness etc.) must have legal representatives and/or guardians connect with them.

- 2- Beneficence ECT should be conducted only when it's in the patient's best interest, with clear-cut research and evidence supporting its administration. A treatment goal should be established, and regular assessments should be conducted to test the treatment's progress, making sure it always benefits the patient. In short, the Patient should be protected from harm as far as possible.
- 3- Nonmaleficence ECT should be conducted by appropriate and licensed medical professionals. Additionally, Anesthesia and muscle relaxants should also be administered to ensure the patient's comfort and safety during the procedure.

All side effects caused by ECT should be carefully tracked and charted. If at any point the risks of ECT outweigh its benefits, the treatment should be halted.

- 4- Justice Should the need arise, ECT should be available to all regardless of one's race, socioeconomic status, Identity and cultural background. Medical professionals should not let their personal bias interfere with their judgment or treatment of their patients.
- 5- Confidentiality- All patient information should be kept confidential and protected.
- 6- Dignity and Respect All patients must be treated with respect and compassion throughout their course of treatment. Their perspectives and concerns should be addressed, and efforts to reduce the stigma caused by ECT should be undertaken.
- 7- Transparency and accountability All procedures, medications, patient responses and consent processes should be properly documented and ready for audit at any time. This ensures that all ethical standards are adhered to.

Before undergoing ECT, a detailed consent form and information sheet are provided to the patient and their family to make sure that everyone involved understands all aspects of the treatment and procedure. The information sheet allows them to understand the type of ECT being administered (unilateral or

bilateral), the medications that will be administered (anesthesia, muscle relaxants, etc), the procedure, side effects and post-treatment life. Patients are already informed that not all side effects can be controlled by their doctors despite a thorough physical examination before ECT, hence they will be required to pay for any additional medical bills caused due to the treatment. That being said, ECT is truly a far cry from what it was before, and patients are truly cared for before, during and even after their treatment.

## PATIENT CARE AND PERSPECTIVES

## FINDING OUT ABOUT ECT

"I think I Googled it, honestly. I probably just read about it on Wikipedia or something. I saw the success rate was pretty high, so I might as well just bring it up and see if it's an option"

"I knew that a lot of the information around was very negative and scary. I didn't want to find out too much about it and put myself off"

"the impression I had been given from reading... was that it was something horrifying"

## MAKING A DECISION

"I feel if I make the decision to go ahead and have the ECT, I will no longer be responsible for having the manic depression-that I will have chosen the most barbaric treatment and in return will be relieved of the burden of responsibility for having this illness. Hopefully, all of the guilt and shame I have about bringing this illness on myself from all my neuroses, compulsions, and obsessions will fade away."

"In late August 1977 when it was suggested that I consider ECT as a possible course of treatment for my depression I was repelled. The alternatives were hospitalization or the misery of depression, both of which were highly repugnant to me. But hospitalization, especially in a strange town (Homewood, in Guelph, as indicated earlier) was more repugnant than ECT. At that time I was so desperate"

Some put their preferences aside and just put their faith in their doctor "I think it was just the trust in him really. It was really my only hope..."

# PRECONSIEVED NOTIONS BEFORE ECT

"My father had it... back in the '50s... I was horrified about the whole idea of it... I suppose it was the fear from my father's time... Now here I was facing the same thing"

"I'd seen how it helped the young girl in [hospital] a couple of years before, so I had that in my head, like, 'Okay, I've seen it work for someone'"

"My first contact with ECT will provide the "flavor" of the general atmosphere surrounding it and will also help to explain why I had such a strong negative attitude toward it. During the mid-to-late 1950s I was a graduate student in clinical psychology at the University of Illinois. As part of our training we were required to study various clinical techniques and procedures, which included ECT. We visited a psychiatric state hospital in central Illinois to observe patients of various diagnostic categories and how

ECT was administered. As I write this, I still shudder at the memory and still feel the sickness in my stomach. Fortunately, the procedures are now much more humane and benevolent."

"I know I am ready, but lying here waiting for Dr.Welch, the image of One Flew Over the Cuckoo's Nest flashes through my mind. I remember them pulling Jack Nicholson down and attaching him to the bed, then the convulsions where his body is just racked with shaking, violent spasms."

## IMPACT OF SUPPORT FROM FAMILY AND FRIENDS

I only want to know if I'm going to feel any pain. "You have no reason to worry," she assures me. "You won't feel a thing." "Easier than root canal?" I ask. "No comparison." She smiles. (Andy Behrman takes advice from a women Lena, who claimed "that ECT has saved her" life, before his treatment.

"I'm glad that my whole family is here with me in my hospital room."

"We started ECT around the same time... you got to talk to someone who actually did have that treatment the morning before. We were definitely on that little journey together, which was really helpful".

"I feel great the next day and spend it watching television, and packing up my things, and saying good-bye to my shock buddies"

I've had ECT, I have a list that I thought I'd share. A list of the electroshock treatment gang who have also benefited from ECT. I do this because I find that I frequently feel better about myself when I discover that we're not alone, but that there are, in fact, a number of other people who ail as we do"

### SUPPORT FROM DOCTORS AND NURSES

"Dr. Wallenstein He reminds me of my childhood pediatrician, and I feel at ease with him right away."

"I really like talking to the [staff] here they make me feel that I have something to live for."

"they treat you more like a person rather than an object. I think there is some level of compassion and acceptance and respect. The nurse who looked after me was interested in how I felt and about me, not what I should be feeling but was asking about me, she was the first person who listened"

## PATIENTS POSITIVE EXPERIENCES WITH ECT

"I had gone from feeling like an emotional cripple to feeling well."

"It pulled me from an abyss of psychological despair," Pierre, a physical therapist in Los Angeles

"At the time I said I would never, ever want to have ECT again," says Elvidge, who is forty-one now and a mental health counselor in Illinois.

"Later I saw how it had helped me get my life back. ECT is not easy. but I believe it's better than taking your own life."

## DOCTORS TAKE ON ECT

"The reason," says Dr. Jonathan Brodie, interim chairman of psychiatry at NYU, "is grounded only in ignorance and history. Policies at public hospitals are decided by lay boards of directors, who chased ECT out of the public domain. They decided this was a barbaric treatment and now public institutions no longer do it. It means that poor people are denied wonderful care. ECT is a wonderful treatment when it is used appropriately."

"The attitude toward ECT displayed by many teaching psychiatrists and psychoanalysts varied from overt antagonism to smug condescen-sion," Dr. Zigmond M. Lebensohn, an ECT pioneer and former chief of psychiatry at Sibley Memorial Hospital in Washington, D.C., wrote sey-eral years ago in a psychiatric journal. "The psychiatrist who still administered ECT was often viewed with the same gaze that gynecologists used to reserve for their colleagues who performed abortions in the days before legalization. In some centers, a double standard seemed to exist. I have known analysts who condemn ECT in public but who have privately recommended it for individual patients and even for members of their own family "

Dr. Elizabeth Childs, who ran the ECT program at Boston's Carney Hospital before taking over in 2003 as commissioner of mental health says that whenever she raises ECT as an option with fellow psychiatrists, "they say, 'There you go again? They think of me as a cowboy because I talk about ECT." Childs thinks psychiatrists' reluctance to consider ECT stems from more than prejudice or fear. "It's a very deep cultural thing in our profession that we still doubt the true pain of mental illness, and we as physicians give up. We don't believe in the resiliency of human beings to get better. We've got to say, 'I'm willing to bring to bear everything in my armamentarium to get them better.' If you don't believe someone really is ill, you aren't going to take a chance with a procedure like ECT. If you don't believe they are going to get better then you won't be willing to expose a patient to ECT's side effects, and it does have significant side effects."

"Most residents get some exposure to ECT, but in most cases the exposure is very, very limited," says Dr. Richard Weiner of Duke University, who runs what may be the world's most esteemed ECT training program. "Residency review committees say that residents have to have an understanding of ECT—its indications, benefits, and risks. But the committees don't say that residents have to be competent to administer ECT." A survey of pupils from The University of Arkansas for Medical Science discovered that Thirty-one percent of medical students thought ECT was used to punish violent or uncooperative patients, 30 percent ECT was commonly administered on the poor and minorities. Lastly 24 percent of them stated that ECT causes brain damage.

## CONCLUSION

ECT is still defined by its brutal past. It's often viewed as a dangerous and "last resort" treatment. Most of the patients in the past were either forced into the treatment or heavily misinformed. From the prevalence of ECT in war, the child abuse it caused, the families it tore apart and the lives it gruesomely altered, no light seemed to be found. Its negative portrayals in pop culture, its past abuse of ethics, its side effects and the fundamental fear that it has created have not only decreased its use but also undermined its value. However, the Milgram experiment and the Anti-Psychiatry movement acted as catalysts of change, bringing the light with it. Things changed after the APA tightened the ethical guidelines and changed

psychological ethics for the better. The truth of the matter is that, while alternative treatments for bipolar disorder, schizophrenia, depression and life-threatening cases are available, nothing has helped more than ECT. As we examine its social and ethical evolution, we can see ECT's true transformation. Electroconvulsive Therapy is in longer about shocks and shame but instead stands as a testament of progress and social change. We now have support groups, patient advocacy, rigid ethical practices, precise procedures, patient aftercare, and so much more. While I do agree that ECT still has a long way to go, I reiterate that ECT is a far cry from what it was, and should be viewed as such

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