The Use of Electroconvulsive Therapy on Death Row

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Despite high rates of mental illness among incarcerated people in the United States, use of electroconvulsive therapy (ECT) remains limited in jails and prisons. There are some published guidelines regarding the provision of mental health care, including ECT, in U.S. correctional facilities, but little attention has been paid to the use of ECT for individuals sentenced to death. This article examines ECT within the context of the death penalty, including court consideration of ECT in capital cases and historic uses of ECT to facilitate execution of people on death row. Given the unique clinical, legal, and ethics considerations in the use of ECT for people sentenced to death, the authors call for greater attention to these practices and propose general guidelines regarding the use of ECT in this population.

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Although incarcerated people in the United States tend to have higher rates of mental illness than the general population, electroconvulsive therapy (ECT), which is one of the most effective interventions for certain psychiatric conditions, is rarely used in correctional settings.[1,2] A small body of recent literature has explored this discrepancy between rates of mental illness in these settings and rates of ECT use, in addition to proposing guidelines for the use of ECT for individuals who are incarcerated.[1,3,4] These guidelines have identified the potential usefulness of ECT in these contexts and provided recommendations regarding ECT referral and administration. This literature has also examined aspects of treatment in correctional settings that warrant special attention, including informed consent, stigma, and the ethics risks associated with the involuntary administration of ECT (e.g., for restoring competence to stand trial). The use of ECT for people sentenced to death has, however, received little, if any, attention in recent decades. To our knowledge, there are currently no published guidelines regarding the use of ECT for individuals sentenced to death. Furthermore, ECT is rarely, if ever, mentioned in guidelines for the provision of psychiatric care to individuals on death row or in other resource documents or literature on psychiatry and the death penalty.[5–10]

As of November 2022, there are 27 states that continue to practice capital punishment, with three of these having issued moratoria on executions.[11,12] In light of the complex history and nature of ECT, its use on individuals sentenced to death merits scrutiny by health professionals. The following article explores the role that ECT plays in capital cases, in relation to both legal outcomes and postconviction treatment. Given the unique ethics, legal, and clinical challenges surrounding the use of ECT for people on death row, the authors propose general guidelines regarding the use of ECT in these populations.

The Use of ECT in Jails and Prisons

People in jails and prisons deserve access to evidence-based interventions to treat mental illness. Since the case of *Estelle v. Gamble* in 1976 codified that deliberate indifference to the serious health needs of prisoners may constitute cruel and unusual punishment, U.S. courts have made correctional institutions responsible for providing incarcerated individuals with adequate access to health care.[13] In addition to

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publishing a report on the provision of psychiatric services in jails and prisons,[14] the American Psychiatric Association (APA) has issued a position statement asserting that "The fundamental goal of mental health services in a correctional setting is to provide the same level of care to patients in the criminal justice process that should be available in the community" (Ref. 7, p 1). ECT can be effective for treatment-resistant depression, as well as acute suicidality, catatonia, and depression with psychotic features.[15–21] Research suggests that ECT can be a useful intervention for improving food intake and reducing acute suicidality, as well as for the treatment of psychotic depression in older individuals.[22,23] ECT might also prove lifesaving in cases of catatonia and neuroleptic malignant syndrome, both of which are associated with significant morbidity and mortality.[24,25]

Many conditions that can be treated with ECT are overrepresented in jails and prisons; reports describe high rates of major depressive disorder, schizophrenia and other psychotic disorders, and bipolar disorder in these settings.[26,27] Moreover, as a result of these high rates of mental illness, as well as the stresses of incarceration, substance use, and suicidal behaviors (including self-harm, suicide attempts, and suicides) are prevalent among incarcerated people.[28,29] Gaps in access to evidence-based mental health care in these settings persist, however. Research indicates that ECT is widely underused in community settings, with one study finding that just 2,471 (.25%) of 969,277 people in the United States with a mood disorder had received ECT in 2014.[30] Similarly, ECT is rarely used in U.S. jails and prisons. A 2015 study of correctional systems across the country surveyed states' departments of corrections regarding their use of ECT. Of the 31 departments that responded, only four reported having used ECT within the previous five years, despite many respondents describing a high degree of mental health needs in their facilities.[1] Clinicians have proposed guidelines to help providers seeking to obtain ECT for their patients in prisons.[4] Such resources, however, are limited by significant variation in state laws and procedures related to ECT and its use for people who are incarcerated.[31]

ECT as a Defense in Capital Cases

In courtrooms and other legal settings, ECT has played a unique role in the determination of outcomes of capital cases. Numerous people who have been charged with crimes that are eligible for the death penalty have either received or been considered for ECT before their alleged crimes. For example, prosecutors had sought the death penalty for Andrea Yates, whose postpartum mental illness was thought to have contributed to her drowning her five children in 2001.[32] According to a *Lancet* article describing her case and history, psychiatrists had considered ECT as a potential treatment for her symptoms before her commission of the crimes.[32] This history exemplified the severity of her mental illness, the symptoms of which were considered during her criminal proceedings and her counsel's pursuit of an insanity defense.[32]

Similarly, death penalty cases in several states, such as Arizona, California, Texas, and Florida, involved defendants who had histories of psychiatric treatment, including ECT, before the commission of offenses leading to their death sentence; these defendants appealed their death sentences on the basis of alleged ineffective assistance of counsel or insufficient investigation of mental health history, including ECT, as a mitigating factor in their capital case.[33–36] For example, a failure during the penalty phase of Warren Summerlin's capital murder trial to consider his history of receiving ECT was central to the appeal of a death penalty sentence in *Summerlin v. Shiro*.[36] In this case, the appellate court ultimately reversed the district court's denial of Mr. Summerlin's petition, remanding the case for the district court to grant a writ of *habeas corpus* as to his death sentence.[36] Similarly, an individual in California who was convicted on three counts of first-degree murder filed a petition for writ of *habeas corpus*, challenging the imposition of a death sentence. He alleged that there was a failure to investigate a diminished capacity defense, as his history of having received ECT as a teenager should have been considered in the determination of his case.[33]

The Use of ECT on Death Row

Despite limited literature on the use of ECT for people on death row, ECT has been used on numerous occasions to treat mental illness in individuals who have been sentenced to death. For example, San Quentin State Prison in California has historically housed a large proportion of the nation's death row population; it was one of the first institutions to use

"Cerletti electric shock treatment" as a treatment modality.[37,38] According to physician testimony cited in an *amicus* brief of the American Civil Liberties Union, ECT has been used in the treatment of dozens of condemned prisoners with mental illness there.[39] In the 1960s, a San Quentin prison psychiatrist testified that "it is not uncommon for inmates of the row to be removed for psychiatric treatment (including extensive electric shock therapy) to restore them to their senses for their execution" (Ref. 39, p 20). Another physician described an individual on death row as becoming "impossible to communicate with and on one occasion I found him walking in his cell in his own excretum, just babbling" (Ref. 39, p 35). This individual was later transferred to a hospital, where "he was given electric shock therapy and finally after a series of such treatments, he recovered sufficiently so that his execution could be legally arranged" (Ref. 39, p 35).

A number of articles have discussed the provision of mental health services for people on death row.[5,10,40–43] The care of individuals sentenced to death has evolved significantly in the past several decades amid scrutiny from medical organizations, experts, and the public. For example, APA guidelines indicate that psychiatrists should refrain from providing psychiatric treatment for the purpose of restoring a patient's competence for execution.[5] Additionally, the World Psychiatric Association has asserted that psychiatrists should never participate in legally authorized executions or participate in assessments of competency to be executed.[43] Similarly, the use of ECT has evolved considerably over the last few decades as well. Various medical organizations, such as the APA, have developed guidelines regarding the use of ECT for psychiatric conditions, with research indicating that this intervention is generally safe and effective for the treatment of specific psychiatric conditions.[44–46]

Clinical, Legal, and Ethics Considerations

When caring for people with mental illness, mental health professionals have responsibilities to alleviate suffering and preserve dignity while avoiding harm; these responsibilities are magnified in the care of people sentenced to death. ECT offers one of the most effective methods for rapidly treating severe psychiatric illness; at the same time, the use of ECT for individuals on death row raises competing clinical, legal, and ethics challenges.

Treatment Needs

Available data suggest that people sentenced to death in the United States also have high rates of mental illness, as well as suicidal behaviors.[28,47,49,50] Although rates of suicide among general prison populations are often high in comparison with community samples, rates of suicide among people living on death row appear to be even higher.[50] Additionally, people sentenced to death are often confined in highly restrictive housing with extensive security measures (e.g., limited out-of-cell time, shackles during movement, multiple custody staff escorts when moving). These types of conditions may be associated with development of psychiatric symptoms, including demoralization, depression, psychotic-like symptoms, and suicidal behaviors.[51,52] Some researchers have proposed that, taken together, these psychiatric symptoms may represent a form of "Death Row Syndrome."[53] At the same time, other scholars have voiced concerns related to the use of such labels, noting that to do so risks co-opting psychiatric practice and diagnoses "to meet moral and political ends" (Ref. 54, p 155).

Although people sentenced to death may have psychiatric illness before entering death row, the harsh conditions of confinement experienced by these individuals, often for years or decades, may exacerbate these underlying conditions or lead to the development of new psychiatric concerns.[55,56] Given the prevalence of mental health concerns among people on death row, as well as the effectiveness of ECT in treating many severe psychiatric conditions, access to this treatment could potentially relieve suffering or even prove lifesaving for certain individuals.

Logistical Considerations

Whereas case law has determined that correctional facilities must provide incarcerated people with access to adequate general medical and mental health services, correctional facilities face significant barriers with regard to the provision of ECT. A recent survey of correctional systems across the country identified multiple reported barriers to being able to access ECT in these settings; these include stigma surrounding ECT, ethics concerns regarding consent, financial barriers, and logistical concerns related to transport and security since most ECT is provided off-site.[1] Of these, the concerns of staffing and transportation might be especially significant in the case

of individuals on death row, because matters related to legal scrutiny and security concerns among custody staff might be heightened for individuals sentenced to death.

Estimates suggest that more than half of all individuals currently on death row in the United States are over the age of 50.[47] Given the medical risks associated with ECT and potential co-occurring general medical concerns among aging individuals on death row, the need for medical evaluation and monitoring after ECT might be especially important to consider.[9,48] Because individuals sentenced to death often require higher levels of security and observation, however, hospitals may lack adequate staffing, space, or security measures to oversee the care of people on death row. Similarly, concerns related to staffing and cost might affect a prison's ability to provide transportation to and from the hospital, several times per week for multiple weeks, when condemned individuals are being considered for treatment with ECT. In a resource document on the provision of ECT in adult correctional settings, Williams and Arvidson[4] note that concerns related to security and elopement risk might sway clinicians in the direction of an "outpatient" course (involving transport between facilities between each treatment). They also note that limited medical care in jails and prisons and concerns related to co-occurring general medical conditions might point to the need for monitoring at the outside hospital for the duration of the treatment course.

Due Process

Depriving someone of access to evidence-based mental health care when clinically indicated could, in theory, deprive that individual of the ability to exhibit the various legal competencies needed when facing the death penalty. In the sentencing phase of a capital trial, an individual's ability to advocate appropriately for oneself against the death penalty and rationally engage in the conduct of one's own defense might be negatively affected by the presence of psychiatric illness. Mental illness remains a relevant consideration in capital cases even after conviction and sentencing, however, given its potential impact on waivers of the right to appeals and the right to postconviction review. Depression and psychosis have been cited as potential contributors, among others, to decisions by defendants regarding waiving the right to appeals in capital cases.[57]

Concerns related to the impact of mental illness on an individual's waiver of the right to appeals and postconviction review have been raised in legal settings. In *Rees v. Payton*,[57] the U.S. Supreme Court considered that a waiver of appeals may be the product of a mental disease, disorder, or defect, which might affect an individual's ability to make "rational" decisions in relation to one's case.[58] Similarly, after being convicted of capital murder in Texas, one man's history of suicidal behaviors was considered by experts in determinations of his ability to competently withdraw his petition to challenge his conviction and death sentence.[59] The Texas District Court considered the question of his competence and how it might be negatively affected by a mental disease or defect, such as depression. The court highlighted the defendant's pattern of making contradictory decisions and held that his history of mental illness impaired his ability to waive with competence his right to *habeas corpus* review of his sentence and conviction.[59] In 1997, another individual sentenced to death filed an appeal to challenge his sentence, but after the courts reaffirmed the sentence of the death penalty, he declined to pursue postconviction review; several mental health experts appointed to evaluate him found that his choice was motivated by a desire to obtain relief from delusions by dying.[60]

Historical and Cultural Context

Clinicians should also consider cultural and historical factors influencing perceptions of treatment when exploring the use of ECT for individuals sentenced to death. ECT has long been controversial in the public eye, attracting considerable media attention, portrayals in pop culture, and associated stigma. In the 1980s, residents of Berkeley, California, voted to ban ECT, making the use of this intervention a crime. Although this ordinance was later overturned, the decision to ban a medical intervention reflected negative public perception of ECT as a specific treatment modality.[61] Further, the act of electrocution has a dark history in U.S. jails and prisons, as electric shock devices have been used punitively in these settings. In the 1967 case of *Jackson v. Bishop*,[61] three individuals incarcerated at the Arkansas State Penitentiary alleged that a "telephone shocking apparatus" had been used as a form of corporal punishment.[62] In addition to the physical parallels between ECT and execution by electrocution (which as of March 2021 remained legal in eight states), ECT has

been used as a comparison during legal arguments about whether the electric chair or shocks cause pain[63,64]; a 2022 case in South Carolina centered on questions related to whether individuals being executed feel pain during electrocution.[64] The need for anesthesia and muscle relaxants in ECT was used as evidence that individuals undergoing electrocution may, in fact, experience significant suffering.[64] In addition, the electric chair itself has been referred to by some as "electroshock therapy."[65] As a result of this history, individuals on death row might carry significant and understandable anxiety about ECT, including the nature of the procedure, how it has been portrayed in the media and popular culture, and the inherent parallels between ECT and methods of execution. Incarcerated people or the public may not appreciate the therapeutic uses of ECT and, for understandable reasons, view this tool as being used for punitive reasons on patients.

Consent to Treatment

It is difficult to conjure a more coercive environment than incarceration on death row, which complicates whether an individual might be able to provide informed consent for ECT in this setting. In the case of *Kaimowitz v. Department of Mental Health for the State of Michigan,*[66] John Doe had been convicted of rape and murder of a nurse at the state hospital at which he was committed. He was identified as a "criminal sexual psychopath" and was later enrolled, along with 24 other sexual offenders, as a research subject in a study on aggression.[66] He and his parents had consented to receiving an experimental form of psychosurgery; however, plaintiff Kaimowitz, on behalf of John Doe and the Medical Committee for Human Rights, raised concerns about the legality of such experimentation.[66] The Michigan circuit court found in 1973 that the restrictive environment of the involuntarily committed individual directly influences the individual's ability to provide a true voluntary decision.[66] Individuals living on death row might similarly be considered vulnerable to the influence that a death sentence might have on decisions regarding treatment.

As previously noted, ECT might be considered a means by which to treat mental illness that is negatively affecting individuals' motivation and ability to engage actively in their case and in the conduct of a defense. For all individuals pretrial, in both capital and noncapital cases, ECT and other psychiatric treatments might result in effects that negatively affect an individual's ability to participate in legal proceedings. In *Sell v. United States*,[67] the U.S. Supreme Court determined that, when considering involuntary treatment for restoration of competency to stand trial, a risk-benefit analysis must include consideration of the potential side effects of treatment and the impact on the individual's ability to participate in the criminal proceedings.[67] The Court noted that risk for sedation, impaired communication, inability to rapidly react to trial developments, or diminished ability to express emotions are among risks that should be considered, given the potential for such symptoms to negatively affect the overall fairness of the trial.[67]

Williams and Arvidson[4] highlight the potential impact of treatment on pretrial detainees, for whom competence to stand trial might be influenced by such side effects of ECT as retrograde amnesia. In the case of individuals on death row, the sentencing phase is complete and the question of competence to engage in pretrial and sentencing proceedings is not relevant. Appeals and postconviction review, however, have the potential to significantly alter outcomes in capital cases. Although ECT is generally considered to be a safe and effective procedure, its use is also associated with cognitive impairments and amnesia.[9,68,69] Although research has indicated that these effects are generally temporary, studies have found that bilateral ECT is associated with greater deficits, including at two- and six-month follow-up. In contrast, measures of retrograde amnesia were significantly reduced with the use of ultra-brief pulse.[70] In sum, although there is a risk for cognitive deficits after ECT that can affect an individual's ability to participate in legal proceedings related to the death penalty, research indicates that use of specific methods, such as brief pulse and right unilateral electrode placement, can decrease risks of amnesia associated with ECT.[4,70]

Future Directions

ECT is a potentially lifesaving treatment with a controversial history in not only community settings but also jails and prisons. Despite limited literature on the use of ECT on death row, ECT has been used historically on people sentenced to death, including to treat people with mental illness so that these individuals might be executed.[39] Given the competing clinical, legal, and ethics concerns that can arise in

Table 1. Ethics Guidelines for the Treatment of Individuals Sentenced to Death

Organization	Guideline
American Medical Association (AMA)	"No physician should be compelled to participate in the process of establishing a prisoner's competence or be involved with treatment of an incompetent, condemned prisoner if such activity is contrary to the physician's personal beliefs. Under those circumstances, physicians should be permitted to transfer care of the prisoner to another physician."[82]
American Psychiatric Association (APA)	"Physicians should not determine legal competence to be executed. A physician's medical opinion should be merely one aspect of the information taken into account by a legal decision maker such as a judge or hearing officer. When a condemned prisoner has been declared incompetent to be executed, physicians should not treat the prisoner for the purpose of restoring competence unless a commutation order is issued before treatment begins. The task of reevaluating the prisoner should be performed by an independent physician examiner. If the incompetent prisoner is undergoing extreme suffering as a result of psychosis or any other illness, medical intervention intended to mitigate the level of suffering is ethically permissible. No physician should be compelled to participate in the process of establishing a prisoner's competence or be involved with treatment of an incompetent, condemned prisoner if such activity is contrary to the physician's personal beliefs. Under those circumstances, physicians should be permitted to transfer care of the prisoner to another physician."[5]
World Medical Association (WMA)	"RESOLVED, that it is unethical for physicians to participate in capital punishment, in any way, or during any step of the execution process, including its planning and the instruction and/or training of persons to perform executions."[83]
World Psychiatric Association (WPA)	"Under no circumstances should psychiatrists participate in legally authorized executions nor participate in assessments of competency to be executed."[43]

these situations, the authors propose the following guidelines for the use of ECT with people on death row.

First, clinicians should not agree to use ECT in any situation other than to alleviate the suffering of someone on death row (i.e., not for punitive reasons or to facilitate execution). Clinicians should be aware of ethics guidelines on the treatment of individuals sentenced to death (Table 1). According to guidelines by professional organizations, including the APA and the World Psychiatric Association, mental health professionals should not provide treatment for the purpose of restoring competence to be executed.[5,43] People on death row deserve access to evidence-based and humane care, which may include ECT when indicated; however, clinicians should avoid using this intervention in ways that would facilitate execution or other harm to the patient. These boundaries become especially relevant in cases in which involuntary treatment is being considered. Involuntary treatment may be permissible under some circumstances in U.S. jails and prisons, such as use of involuntary medication to address dangerousness related to mental illness according to (see *Washington v. Harper*[71]). Experts have highlighted, however, that involuntary treatment for competence to be executed is different in that it involves intervention for the sole purpose of facilitating death.[57]

Second, in making decisions regarding the use of ECT on death row, clinicians should conduct a careful risk–benefit analysis, consulting published guidelines on the use of ECT and the provision of mental health services in correctional facilities.[4,7,8,14,31] When considering use of ECT for individuals sentenced to death, clinicians should weigh acute risk, suffering, and functional impairment against the potential for more long-term harm if the individual is found competent to be executed. Clinicians should further consider the impact of and minimize the risk for potential side effects from ECT, which might influence an individual's ability to participate in legal proceedings. As with the use of ECT in community settings, clinicians should consider whether the use of less-intensive treatments may be appropriate or indicated before advancing to the use of ECT. For example, in depression, treatment with an antidepressant medication is less invasive, might be associated with less anxiety and stigma, involves less legal complexity, and might improve engagement in legal proceedings with potentially fewer of the cognitive risks associated with ECT. Such guidance is included in resource documents from the Federal Bureau of Prisons related to the treatment of individuals in prisons.[72] Despite the controversies about voluntariness in prisons, clinicians should have frank discussions with their patients regarding these risks and benefits, which in capital cases includes the potential impacts of treatment on the individual's ability to participate in legal proceedings and on outcomes related to potential execution.

Third, when found to be clinically necessary, the use of ECT for individuals sentenced to death should require legal oversight and approval. In their survey

of prison systems across the country, Surya and colleagues[1] noted limited ECT use in these settings, citing concerns related to litigation, coercion, consent, and perceptions of treatment among various legislative and advocacy groups as contributing factors. Given the historical misuse of ECT for the purposes of facilitating execution, as well as ongoing concerns about the prevalence of mental illness and complications regarding informed consent on death row, legal oversight can provide a necessary check to ensure that ECT is being appropriately used solely for clinical purposes and when clinically appropriate. Some experts have identified the potential benefits of appointing a third-party psychiatrist to evaluate the need for ECT in prisons.[1] In fact, California's Welfare and Institution's Code section 5326.7 requires that a committee of two psychiatrists, one from the institution and one appointed by the local mental health director, must agree on the need for administration of involuntary convulsive therapy.[73] Given the unique dynamics influencing psychiatric care on death row, the use of ECT should similarly require evaluation and recommendation by an independent mental health professional, as well as administrative review by such stakeholders as clinical supervisors and legal representation for the patient. Such oversight, combined with judicial review, might protect individuals in prisons from abuse, while also assuaging clinician concerns about using ECT in this setting. These procedures should not prohibit clinicians from providing timely treatment, however, especially in situations requiring urgent intervention. Emergent intervention with ECT might prove lifesaving in cases of malignant catatonia and neuroleptic malignant syndrome.[74–76] Thus, consideration might be given to developing emergency protocols, similar to those that are used in cases of medical emergencies in which lifesaving intervention is indicated and consent cannot be obtained.

Finally, mental health professionals should pay attention to the use of ECT in jail and prison settings, including on death row, and serve as educators to the legal system and general public about this intervention. Laws and policies frequently lack clear guidance on procedures for the use of ECT; in 2006, it was found that law and administrative codes in 33 jurisdictions did not comment in any way on the use of ECT.[77] Access to ECT might further be negatively affected by legislative requirements, with some states like New York, California, and Texas being identified as having more stringent regulation than what is recommended by the APA.[77] When they exist, state laws provide oversight and govern the use of ECT in prisons, although ambivalence regarding the therapeutic potential of ECT remains. For example, the Texas Administrative Code sets limits on the number of sessions an individual can receive over a given period, except if specific requirements are met.[78] This is an important consideration for clinicians who are thinking about using ECT for their patients, because higher numbers of treatments and maintenance ECT treatments may be indicated in certain cases.[79,80] Furthermore, according to the Texas Health and Safety Code, facilities and practitioners must regularly submit reports related to the administration of ECT; the code identifies ECT as one among other reportable procedures, which include "psychosurgery, prefrontal sonic sound treatment, or any other convulsive or coma-producing therapy administered to treat mental illness."[81] Such language reflects how the legal system might continue to place ECT in the same category as procedures that are not used in our field, pointing to the need for mental health clinicians to serve as liaisons in educating the legal system on evidence-based interventions and principles of modern practice. While acknowledging the purpose of legal frameworks in preventing misuse of psychiatric interventions, clinicians might serve as liaisons between the medical and legal systems, working to clarify language in the law regarding the uses of ECT as a therapeutic tool. They might additionally be involved in developing legal protocols for special circumstances, including psychiatric emergencies, for which more urgent approval of ECT might be necessary. In addition to taking an active role in the development of local, state, and national policy regarding ECT for incarcerated people, psychiatrists and other mental health professionals should also provide their expertise regarding the characteristics and treatment of severe mental illness among people on death row, including advocating against public policies that seek to misuse mental health care for the purposes of facilitating execution.[42,57]

Conclusion

As long as the death penalty continues to be used in the United States, people sentenced to death will need access to evidence-based mental health services. The United States has a long and complicated

history of sentencing people to death who have histories of severe mental illness or who develop such mental health concerns while on death row. Although ECT is an evidence-based intervention for the treatment of certain psychiatric conditions, the use of ECT on death row involves numerous clinical, legal, and ethics complexities that must be considered by patients, mental health professionals, policymakers, and the general public. In particular, the historical need to administer ECT to people on death row in the United States raises troubling questions about the use of the death penalty, particularly among people with severe mental illness. Given the concerning historical uses of ECT to facilitate execution in the United States, this article proposes guidelines regarding the use of ECT on death row; however, additional research is needed to better understand the degree of mental health needs among people sentenced to death and the use of ECT in these settings. Further study might provide insights into the experiences of patients and clinicians regarding mental health care on death row, including into the unique challenges faced when considering the potential risks and benefits of ECT in these contexts.

References

1. Surya S, McCall WV, Iltis AS, *et al*. The practice of electroconvulsive therapy in US correctional facilities. J ECT. 2015; 31(3):150–4
2. Treatment Advocacy Center. The treatment of persons with mental illness in jails and prisons: A state survey [Internet]; 2014. Available from: https://www.treatmentadvocacycenter.org/storage/documents/treatment-behind-bars/treatment-behind-bars.pdf. Accessed March 3, 2023
3. Martin M, Ureste P. Electroconvulsive therapy use in the adult U.S. correctional setting: A case report and literature review. J Forensic Sci. 2021; 66(3):1161–4
4. Williams JB, Arvidson MM. Resource document for electroconvulsive therapy in adult correctional settings. J ECT. 2021; 37(1):18–23
5. American Psychiatric Association. Position Statement on Issues Pertaining to Capital Sentencing and the Death Penalty [Internet]; 2020. Available from: https://www.psychiatry.org/File%20Library/About-APA/Organization-Documents-Policies/Policies/Position-Capital-Sentencing-Death-Penalty.pdf. Accessed March 3, 2023
6. American Psychiatric Association. Position Statement on Electroconvulsive Therapy (ECT) [Internet]; 2015. Available from: https://www.psychiatry.org/File%20Library/About-APA/Organization-Documents-Policies/Policies/Position-2015-Electroconvulsive-Therapy.pdf. Accessed March 3, 2023
7. American Psychiatric Association. Position Statement on Psychiatric Services in Adult Correctional Facilities [Internet]; 2018. Available from: https://www.psychiatry.org/File%20Library/About-APA/Organization-Documents-Policies/Policies/Position-2018-Psychiatric-Services-in-Adult-Correctional-Facilities.pdf. Accessed March 3, 2023
8. American Psychiatric Association. Psychiatric Services in Correctional Facilities (3rd ed.). Arlington, VA: American Psychiatric Publishing; 2016
9. Salik I, Marwaha R. Electroconvulsive Therapy. Treasure Island, FL: StatPearls Publishing; 2022
10. Yanofski J. Setting up a death row psychiatry program. Innov Clin Neurosci. 2011; 8(2):19–22
11. Death Penalty Information Center. State by State [Internet]. Available from: https://deathpenaltyinfo.org/state-and-federal-info/state-by-state. Accessed March 3, 2023
12. Death Penalty Information Center. Facts About the Death Penalty [Internet]; 2023 Feb 24. Available from: https://documents.deathpenaltyinfo.org/pdf/FactSheet.pdf. Accessed March 3, 2023
13. Estelle v. Gamble, 429 U.S. 97 (1976)
14. American Psychiatric Association. Psychiatric services in jails and prisons: a task force report of the American Psychiatric Association (2nd ed.). Washington DC: American Psychiatric Publishing; 2000
15. Rönnqvist I, Nilsson FK, Nordenskjöld A. Electroconvulsive therapy and the risk of suicide in hospitalized patients with major depressive disorder. JAMA Netw Open. 2021; 4(7):e2116589
16. Kellner CH, Knapp R, Husain MM, *et al*. Bifrontal, bitemporal and right unilateral electrode placement in ECT: Randomised trial. Br J Psychiatry. 2010; 196(3):226–34
17. Kellner CH, Fink M, Knapp R, *et al*. Relief of expressed suicidal intent by ECT: A consortium for research in ECT study. Am J Psychiatry. 2005; 162(5):977–82
18. Sienaert P, Dhossche DM, Vancampfort D, *et al*. A clinical review of the treatment of catatonia. Front Psychiatry. 2014; 5:181
19. Lloyd JR, Silverman ER, Kugler JL, Cooper JJ. Electroconvulsive therapy for patients with catatonia: Current perspectives. Neuropsychiatr Dis Treat. 2020; 16:2191–208
20. Luchini F, Medda P, Mariani MG, *et al*. Electroconvulsive therapy in catatonic patients: Efficacy and predictors of response. World J Psychiatry. 2015; 5(2):182–92
21. Rothschild AJ. Treatment for major depression with psychotic features (psychotic depression). Focus (Am Psychiatr Publ). 2016; 14(2):207–9
22. Sherman FT. Life-saving treatment for depression in elderly. Always think of electroconvulsive therapy (ECT). Geriatrics. 2009; 64(4):8–12
23. Geduldig ET, Kellner CH. Electroconvulsive therapy in the elderly: New findings in geriatric depression. Curr Psychiatry Rep. 2016; 18(4):40
24. Modi S, Dharaiya D, Schultz L, Varelas P. Neuroleptic malignant syndrome: Complications, outcomes, and mortality. Neurocrit Care. 2016; 24(1):97–103
25. Connell J, Oldham M, Pandharipande P, *et al*. Malignant catatonia: A review for the intensivist. J Intensive Care Med. 2023; 38(2):137–50
26. Bronson J, Berzofsky M. Indicators of mental health problems reported by prisoners and jail inmates, 2011–12 [Internet]; 2017 Jun. Available from: https://bjs.ojp.gov/content/pub/pdf/imhprpji1112.pdf. Accessed March 3, 2023
27. James D, Glaze L. Mental health problems of prison and jail inmates. U.S. Department of Justice Bureau of Justice Statistics [Internet]; 2006 Sept. Available from: https://bjs.ojp.gov/content/pub/pdf/mhppji.pdf. Accessed March 3, 2023
28. Carson E. Suicide in Local Jails and State and Federal Prisons, 2000–2019 – Statistical Tables. U.S. Department of Justice, Bureau of Justice Statistics [Internet]; 2021 Oct. Available from: https://bjs.ojp.gov/sites/g/files/xyckuh236/files/media/document/sljsfp0019st.pdf. Accessed March 3, 2023
29. Fazel S, Ramesh T, Hawton K. Suicide in prisons: An international study of prevalence and contributory factors. Lancet Psychiatry. 2017; 4(12):946–52

30. Wilkinson ST, Agbese E, Leslie DL, Rosenheck RA. Identifying recipients of electroconvulsive therapy: Data from privately insured Americans. Psychiatr Serv. 2018; 69(5):542–8
31. Livingston R, Wu C, Mu K, Coffey MJ. Regulation of electroconvulsive therapy: A systematic review of US state laws. J ECT. 2018; 34(1):60–8
32. McLellan F. Mental health and justice: The case of Andrea Yates. Lancet. 2006; 368(9551):1951–4
33. Williams v. Vasquez, 817 F. Supp. 1443 (E.D. Cal. 1993)
34. Bigby v. Thaler, No. 4:08-CV-765-Y (N.D. Tex. Apr. 5, 2013)
35. Arbelaez v. Fla. Dep't of Corr., 662 F. App'x 713 (11th Cir. 2016)
36. Summerlin v. Schriro, 427 F.3d 623 (9th Cir. 2005)
37. St. John P, Moore M, These are the 737 inmates on California's death row. Los Angeles Times [Internet]; 2019 Mar 13. Available from: https://www.latimes.com/projects/la-me-death-row/. Accessed March 3, 2023
38. Bell M, editor. Redirecting the Delinquent: 1947 Yearbook. National Probation and Parole Association; 1947. Available from: https://books.google.com/books?id=qahPaVyYbvYC&printsec=frontcover&vq=schmidt#v=onepage&q&f=false. Accessed March 3, 2023.37.
39. Brief of American Civil Liberties Union, *Amicus Curiae*, in the Supreme Court of the United States. October Term 1971. Records and Briefs of the United States Supreme Court. Available from: https://books.google.com/books?id=TiOR7R63n4EC. Accessed March 3, 2023
40. Weinstock R, Leong GB, Silva JA. Competence to be executed: An ethical analysis post Panetti. Behav Sci & L. 2010; 28(5):690–706
41. Blanks R, Pinals D. Competence to be executed. J Am Acad Psychiatry Law. 2007 Sep; 35(3):381–4
42. Radelet ML, Barnard GW. Treating those found incompetent for execution: Ethical chaos with only one solution. Bull Am Acad Psychiatry Law. 1988; 16(4):297–308
43. World Psychiatric Association. Madrid Declaration on Ethical Standards for Psychiatric Practice [Internet]; 2011. Available from: https://www.wpanet.org/current-madrid-declaration. Accessed March 3, 2023
44. Rasmussen KG. Principles and Practice of Electroconvulsive Therapy (1st ed.). Washington, DC: American Psychiatric Publishing; 2019
45. Pagnin D, de Queiroz V, Pini S, Cassano GB. Efficacy of ECT in depression: A meta-analytic review. J ECT. 2004; 20(1):13–20
46. Hermida AP, Tang YL, Glass O, *et al*. Efficacy and safety of ECT for behavioral and psychological symptoms of dementia (BPSD): A retrospective chart review. Am J Geriatr Psychiatry. 2020; 28 (2):157–63
47. Snell T. Capital Punishment, 2020 – Statistical Tables. U.S. Department of Justice, Bureau of Justice Statistics [Internet]; 2021 Dec. Available from: https://bjs.ojp.gov/content/pub/pdf/cp20st.pdf. Accessed March 3, 2023
48. Flint AJ, Gagnon N. Effective use of electroconvulsive therapy in late-life depression. Can J Psychiatry. 2002; 47(8):734–41
49. Baumgartner F, Neill N. Does the death penalty target people who are mentally ill? We checked. The Washington Post [Internet]; 2017 April 3. Available from: https://www.washingtonpost.com/news/monkey-cage/wp/2017/04/03/does-the-death-penalty-target-people-who-are-mentally-ill-we-checked/. Accessed March 3, 2023.
50. Tartaro C, Lester D. Suicide on death row. J Forensic Sci. 2016 Nov; 61(6):1656–9
51. American Civil Liberties Union. A Death Before Dying: Solitary Confinement on Death Row [Internet]; 2013 Jul. Available from: https://www.aclu.org/sites/default/files/field_document/deathbeforedying-report.pdf. Accessed March 3, 2023
52. Reiter K, Ventura J, Lovell D, *et al*. Psychological distress in solitary confinement: Symptoms, severity, and prevalence in the United States, 2017-2018. Am J Public Health. 2020; 110(S1): S56–S62
53. Wallace-Wells D. What is Death Row Syndrome? Slate [Internet]; 2005 Feb 1. Available from: https://slate.com/news-and-politics/2005/02/what-is-death-row-syndrome.html. Accessed March 3, 2023
54. Schwartz HI. Death row syndrome and demoralization: Psychiatric means to social policy ends. J Am Acad Psychiatry Law. 2005 Jun; 33(2):153–5
55. Andersen HS, Sestoft D, Lillebaek T, *et al*. A longitudinal study of prisoners on remand: Psychiatric prevalence, incidence and psychopathology in solitary vs. non-solitary confinement. Acta Psychiatr Scand. 2000; 102(1):19–25
56. Haney C. Mental health issues in long-term solitary and "supermax" confinement. Crime & Delinq. 2003; 49(1):124–56
57. Weiss KJ. Waiving death row appeals: Whose right is it anyway? J Am Acad Psychiatry Law. 1999 Sep; 27(3):471–81
58. Rees v. Peyton, 384 U.S. 312 (1966)
59. In Re Cockrum, 867 F. Supp. 484 (E.D. Tex) (1994)
60. Corcoran v. Buss, 483 F. Supp. 2d 709 (N.D. Ind) (2007)
61. Baxter LR, Roy-Byrne P, Liston EH, Fairbanks L. The experience of electroconvulsive therapy in the 1980s: A prospective study of the knowledge, opinions, and experience of California electroconvulsive therapy patients in the Berkeley years. Convuls Ther. 1986; 2 (3):179–89
62. Jackson v. Bishop, 268 F. Supp. 804 (E.D. Ark) (1967)
63. Death Penalty Information Center. Methods of Execution [Internet]. Available from: https://deathpenaltyinfo.org/executions/methods-of-execution. Accessed March 3, 2023
64. Reynolds N. 2nd day of testimony on SC death penalty centers on whether executed feel pain. The Post and Courier [Internet]; 2022 Aug 3. Available from: https://www.postandcourier.com/news/2nd-day-of-testimony-on-sc-death-penalty-centers-on-whether-executed-feel-pain/article_8b4fab04-1364-11ed-8f0b-93ba70d4aac3.html. Accessed March 3, 2023
65. Letters: Pennsylvania should get a spine and enforce the death penalty. The Philadelphia Inquirer [Internet]; 2010 Aug 12. Available from: https://www.inquirer.com/philly/opinion/20100812_Letters__Pennsylvania_should_get_a_spine_and_enforce_the_death_penalty.html. Accessed March 3, 2023
66. Kaimowitz V. Department of Mental Health for the State of Michigan, No. 73-19434-AW (Mich. Cir. Ct., July 10, 1973)
67. Sell v. United States, 539 U.S. 166 (2003)
68. Andrade C, Arumugham SS, Thirthalli J. Adverse effects of electroconvulsive therapy. Psychiatr Clin North Am. 2016; 39 (3):513–30
69. Sobin C, Sackeim HA, Prudic J, *et al*. Predictors of retrograde amnesia following ECT. Am J Psychiatry. 1995; 152(7):995–1001
70. Sackeim HA. Autobiographical memory and electroconvulsive therapy: Do not throw out the baby. J ECT. 2014; 30(3):177–86
71. Washington v. Harper, 494 U.S. 210 (1990)
72. Federal Bureau of Prisons. Management of Major Depressive Disorder [Internet]; 2014 May. Available from: https://www2.fed.bop.gov/resources/pdfs/depression.pdf. Accessed March 3, 2023
73. California Welfare and Institutions Code, §5326.7 (1976). Available from: https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=5326.7&lawCode=WIC. Accessed March 3, 2023
74. Ozer F, Meral H, Aydin B, *et al*. Electroconvulsive therapy in drug-induced psychiatric states and neuroleptic malignant syndrome. J ECT. 2005; 21(2):125–7

75. Morcos N, Rosinski A, Maixner DF. Electroconvulsive therapy for neuroleptic malignant syndrome: A case series. J ECT. 2019; 35 (4):225–30
76. Denysenko L, Sica N, Penders TM, *et al*. Catatonia in the medically ill: Etiology, diagnosis, and treatment. The Academy of Consultation-Liaison Psychiatry Evidence-Based Medicine Subcommittee Monograph. Ann Clin Psychiatry. 2018; 30(2):140–55
77. Harris V. Electroconvulsive therapy: Administrative codes, legislation, and professional recommendations. J Am Acad Psychiatry Law. 2006 Sep; 34(3):406–11
78. Texas Administrative Code, §405.109 (1993). Available from: https://texreg.sos.state.tx.us/public/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=25&pt=1&ch=405&rl=109. Accessed March 3, 2023
79. Lally J, Tully J, Robertson D, *et al*. Augmentation of clozapine with electroconvulsive therapy in treatment resistant schizophrenia: A systematic review and meta-analysis. Schizophr Res. 2016; 171 (1–3):215–24
80. Rabheru K. Maintenance electroconvulsive therapy (M-ECT) after acute response: Examining the evidence for who, what, when, and how? J ECT. 2012; 28(1):39–47
81. Texas Health and Safety Code, §578.007 (2015). Available from: https://texas.public.law/statutes/tex._health_and_safety_code_section_578.007. Accessed March 3, 2023
82. American Medical Association. Code of Medical Ethics, Opinion 9.7.3, Capital Punishment [Internet]. Available from: https://code-medical-ethics.ama-assn.org/ethics-opinions/capital-punishment. Accessed March 3 2023
83. World Medical Association. Resolution on Physician Participation in Capital Punishment [Internet]; 2008 Oct. Available from: https://www.wma.net/policies-post/wma-resolution-on-physician-participation-in-capital-punishment/. Accessed March 3, 2023