


The shocking attitude toward electroconvulsive therapy in Italy

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Editorial

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The recent factious and misleading opinion paper by Read et al,¹ corroborated by a handful of commentaries such as the one by Bental² deserves some considerations, emphasizing the Italian scenario.

Electroconvulsive therapy (ECT) was introduced and successfully delivered by two Italian scientists and clinicians, Lucio Bini and Ugo Cerletti, in 1938. The amazing efficacy on serious life-threatening cases of melancholia, psychotic and delirious mixed states, and catatonia was so evident that it spread within a couple of years to all of Italy and the rest of the world. Since then, hundred thousands of lives have been saved despite the quality of clinical studies is “not good enough” to convince Read et al that ECT is “effective for its target.”

The ECT-contrasting ideology surged in the 1970s, ignited by the anti-psychiatric movement lead by Basaglia in Italy.³ At that time, the Italian asylums were considered the source of psychiatric illnesses themselves, which were not accredited with a biological origin. Thus, neuro-modulatory interventions and pharmacotherapy were deemed as accessory treatments, and ECT was considered a brutal torture,⁴ on the basis of emotional considerations. Consequently, the neglect of the biological underpinning of psychiatric disorders besides the contributing psychosocial factors invariably led to harsh criticism and fierce request for the abolishment of the ECT practice over the past decades.

It is worth remembering that ECT was delivered alongside anesthesia and myorelaxation in most hospitals by the end of the 1950s. Paradoxically, the anti-psychiatric movements would not have witnessed a progressive discharge and de-institutionalization of most psychiatric patients without the progressive release of effective medications (eg, chlorpromazine/haloperidol for psychosis and lithium and the monoamine-oxidase inhibitors [MAOIs] for mood disorders), and ECT, indeed.^{5, 6} Worrisome, the MAOIs and most first-generation antipsychotics (FGAs) have been likewise objected and gradually discontinued due to unduly concern, both in Italy and elsewhere.⁷

On the other side, psychiatry desperately tried to reach the “status” of a full-medical science, at the risk of neglecting its complexity, promoting an evidence-based medicine (EBM) approach focused on the randomized controlled trial (RCT) approach.⁸ While relevant, the RCT approach (and the meta-analysis based on such study design) poorly fit specific interventions, especially when the special populations at study (eg, treatment-resistant patients) are low in numbers, or they present complex comorbidity which are rarely captured by the stringent criteria adopted by RCTs. Also, the EBM approach does not fit the life-saving treatments, such as defibrillation, the efficacy of which is supported by the routine practice rather than statistics; similar considerations may apply to ECT.⁹ The research for something new in psychiatry often misled to the idea that the “new” could necessarily replace the “old,” thus determining the underemployment of relevant drugs such as tricyclic antidepressants (TCAs), lithium, MAOIs, or FGAs, just for the sake of (often slightly more favorable) tolerability and safety profiles despite much lower efficacy of several newer agents compared to the established ones.¹⁰

The efficacy of ECT for a variety of psychiatric conditions, especially catatonias, peripartum¹¹ depression and geriatric depression, delirious mania, treatment refractory schizophrenia¹² and possibly more, is supported by well-grounded clinical evidence.^{13, 14} The safety and tolerability of modern ECT greatly improved compared to the past due to enhanced procedures (eg, electrode displacement and anesthetic routines). Moreover, the ECT therapeutic effect is often more rapid and longer-lasting than the one provided by the sole pharmacotherapy.¹⁵ While several promising neuromodulatory interventions other than ECT received attention in literature in recent years, especially the noninvasive brain stimulation, repetitive transcranial magnetic stimulation, and vagus nerve stimulation, their efficacy is not conclusive,¹⁶ especially compared to that of ECT.¹⁵ ECT has a strong dose–response linear correlation and a definitive correlation between the time of exposure and the subsequent effect.

Unfortunately, although ECT fulfills both core scientific criteria of plausible treatment–effect correlation, in all guidelines the role of ECT is minimized and is proposed as a “second” or “third-line” option to be applied to pharmaco-resistant patients only. In this perspective, ECT is hardly

ever conceived as an early option, independently from the severity or the variety of the clinical presentation. Many practitioners do not consider ECT before multiple medications have been attempted, a process that may span many months or even years and leave the patient seriously ill and dysfunctional for a prolonged period of time.¹⁷ This in spite of the evidence that the length of the episode is one of the variables frequently associated with reduced rates of response to all treatments including ECT.¹⁸ On the contrary, the available literature supports the preferential use of ECT compared to pharmacotherapy when the patient is at the high end of the severity and is clearly urgently or emergently ill. In such cases, ECT should be considered early on, perhaps before any medication trial. Situations that compel the use of ECT as a “first line” intervention are: active suicidal ideation and behavior, severe weight loss, malnutrition or dehydration with subsequent worsening of the medical status, psychosis accompanied by agitation.¹⁹ In these patients, pharmacological treatments with antipsychotics and antidepressants are not only ineffective, but are frequently associated with complications such as chronicity, mood destabilization, and suicidality. Finally, with an appropriate monitoring, the treatment is very safe with a very low incidence of serious adverse events. Considering the neurologic and metabolic burden of side effects associated with long-term use of complex pharmacologic regimens with SGAs, antidepressants and mood stabilizers, ECT should be considered a safe option with a very low incidence of serious adverse events and long-term no-mood destabilizing effect.

While we feel that every opinion matters, it is worth noticing that Read et al¹ and Peter Breggin,² are resolute anti-medication and anti-ECT psychologists, they have limited, or even virtually no first-hand experience as ECT prescribers. Moreover, the meta-analysis conducted by Read et al¹ deserves criticism. While about one million people receive ECT worldwide annually,²⁰ there is a broad heterogeneity in treatment delivery and settings. Most of the confounding factors affecting the efficacy of ECT cannot be controlled. This is particularly true, considering that no placebo-controlled RCT was conducted since 1985, according to the meta-analysis in point.⁹ The case for using ECT rests on five meta-analyses that concluded it is superior to a sham intervention.

They all draw on data from 11 small trials (average number of patients 37), suggesting the chance of a “small-study effect.” Of these, four reported a significant ECT effect, five found no difference, and two had mixed results. Two described follow up, with only near-zero or small effect sizes. The meta-analysis did not address the many limitations of these trials, including their low quality and the incomplete description of randomization and blinding in seven, with none providing convincing evidence they were truly double-blinded. Five reported their findings selectively. Only four included outcomes reported by patients, and none assessed quality of life. That sort of report²¹ is damning in its conclusions about the EBM for ECT,²⁰ concluding there is no evidence of efficacy during or beyond the treatment period in any target patient groups. Indeed, several clinically relevant hallmarks, such as the history of pharmacological resistance (expected in real-world practice), are not covered. Given the “high risk of memory loss and the low risk of death,” the authors call for ECT immediate suspension until more robust evidence shows whether it is of benefit.⁹ The authors claim that the publication bias and low quality of the methods preclude any firm conclusion about the efficacy of ECT. In this view, we feel that the opposite claim (conclusive lack of efficacy) does not stand up likewise.

Unsurprisingly, such review was nonetheless well received in countries like Italy, where the stigma against ECT is still high.²² Even though the national and regional Law in Italy does not ban ECT (yet with strict regulations in some regions), few public and private centers practice it and cannot meet the patients’ needs. This is particularly true comparing the Italian scenario²³ against other European settings,²⁴ and worldwide.²⁰

The National Bioethical Committee, the most relevant institution appointed to provide an ethical judgment of the treatments, favors ECT. Several scientific societies likewise do, including many leading clinicians in the field and brilliant clinical researchers. ECT is a life-saving intervention, especially for severe catatonias or highly suicidal patients. The suspicion of enduring stigma driven by political or ideological prejudices could not be ruled out.

In the 1990s and until his death (2013), Dr. Athanasios Koukopoulos led a movement in favor of ECT reintroduction, which unfortunately had no success.²⁵ Nowadays, the only university center supplying ECT is the University of Pisa: if the academic community steps back from ECT, its teaching to the new generation of clinicians and clinical researchers blunts away.

The new generation of Italian psychiatrists do not know, or worse, have prejudices about ECT; they have never seen it being practiced, nor have they studied it, nor have attended lectures about it unless they had the chance to practice abroad or to get in touch with the previous generations of expert clinicians. Consequently, they are not familiar with the identification of life-threatening syndromes such as catatonia or delirious mood states. Today, in Italy, it is likely that an indefinite number of these patients are not recognized and end up in infectious disease or neuro-rehabilitation wards, without receiving a treatment that, according to the available data, would be effective in more than 80% of cases.

Thus, the present paper is meant as a plea for further academic attention toward the practice of ECT in Italy, a warning toward a critical appraisal of the evidence, especially when it is flawed, and a reinforcing message to practice in the real-world setting managing severe patients before making “science” an ideological pitfall which may ultimately harm the suffering ones.

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