**Electroconvulsive Therapy in Mental Health**

**Electroconvulsive Therapy (ECT)**

Electroconvulsive Therapy (ECT) refers to a procedure involving electric stimulus application into the brain with an aim of triggering a controlled seizure (Mental Health America, n.d). It was utilized for treatment of severe mental illnesses in the early days, but today it is commonly administered, with approximately 100000 individuals utilizing it annually in the U.S for the treatment of acute mania, depression and some schizophrenic symptoms (Mental Health America, n.d). As the Mental Health Organization, (n.d) outlines, the patients are first anesthetized and injected with a muscle relaxant to depress their breathing, which necessitates supporting the patients with oxygen until their natural breathing is restored.

**Social and Legal Controversy**

 Controversies regarding utilization of ETC exist. Most commonly, disagreements are based on how ECT works, and the side effects of the treatment. As Mental Health Organization, (n.d) states, controversy is based on its safety, necessity, and ethics. For instance, by using anesthesia, a physical risk of the treatment is a concern, with death and serious injury being a possibility due to complications related to cardiorespiratory system (Royal College of Psychiatrists, 2015).  Other controversies arise from ECT abuse history, patients perceptions, and unfavorable media and medical reports (Mental Health America, n.d). However, some laws have been developed or modified to protect patients from forced ECT. For example, section 58A of the Mental Health Act require the consent of the patient before the treatment for patients with capacity with appropriate certification for those lacking capacities to decide (Mental Health Online, 2015). Some states have also provided statutes to guide ETC treatment. For instance, the Missouri revised statutes give patients the right to refuse ECT treatment, written voluntary consent should be provided before the treatment and a court order can be used to administer involuntary ECT (Missouri General Assembly, 2016). Such laws have reduced law controversies through their provisions.

**Evidence of Effectiveness**

Different perceptions have been outlined regarding the effectiveness of ECT in mental health treatment. However, various research studies have provided evidence of its effectiveness. One such study conducted by Khalid, Atkins, Tredget, Giles, Champney-Smith, & G, (2008) investigated ECT effectiveness by analyzing the ECT response of patients who had a medical history of not responding to various pharmacological treatments. Results indicated that ECT is a highly effective treatment technique, with 65.8% of the participants showing positive improvement on ECT treatment and 53.3% achieving remission of depression.

The effectiveness of ECT has also been proven by other studies. Bailine, et al., (2010) found out that ECT is effective in the treatment of both unipolar and bipolar depressed patients. Similarly, a study seeking to investigate the efficacy of ECT by exploring difference of ECT response in bipolar I, bipolar II and unipolar depressed patients who were resistant to other pharmacological treatment revealed that this treatment was effective in all the three groups (Medda, Perugi, Zanello, Ciuffa, & Cassano, 2009). According to this study, significant improvement was indicated with a global response rate of 79.1%, 94.1% and 67.4% for bipolar II, unipolar and bipolar I respectively. Additionally, remission rate for depressive symptomatology was 56.7%, 70.5% and 65.3% for bipolar II, unipolar and bipolar I, respectively. Therefore, a significant number of studies have provided evidence of the effectiveness of ECT.

**Evidence of Not Being Effective**

 Most studies suggest that ECT is an effective treatment in mental health, although few scholars doubt its efficacy. As Ministry of Health, (2004) suggests, most scientific evidence on which efficiency of ECT is based is questionable, with most of these studies including participants that are highly selected, rendering generalization of results to the whole population difficult. Additionally, only a limited number of studies contrast simulated ECT with ECT and significant differences in ECT administration methods across studies exist, thereby rendering extrapolation of results to current ECT practice difficult (Ministry of Health, 2004). However, other scholars have a different view on ECT efficacy. For instance, MacQueen, Parkin, Marriott, Begin, & Hasey, (2007), argues that the major concerns regarding this treatment are not associated with its effectiveness since its high efficacy has been proven, but long-term changes in cognition accompanied by the treatment. In this regard, the relevant clinical concern associated with ECT is the long-term anterograde and retrograde changes in memory performance that results (MacQueen, Parkin, Marriott, Begin, & Hasey, 2007). This study collaborates with that by Rose, Fleischmann, & Wykes, (2003) whose findings indicated that participants who had undergone the treatment were suffering from permanent or long-lasting changes in memory. Thus, there is no doubt on the effectiveness of ECT. However, the side effects experienced after administration are of clinical significance.

**Benefits and Harm**

 ECT treatment has some benefits and harms. For benefits, its high effectiveness and especially in rapid relieving depression and mania symptoms cannot be ignored (Royal College of Psychiatrists, 2015). Additionally, ECT has proven effective in the treatment of persistent severe depression that has failed to respond to other pharmacological treatments, other antidepressants have more severe symptoms, and in cases of suicide, it is a fast intervention (Royal College of Psychiatrists, 2015). Thus, patients treated with ETC are likely to recover from their mental conditions more rapidly and the treatment is deemed to be more effective compared to other alternatives.

On the other hand, there are some harm and shortcomings associated with ECT administration. These are in terms of the side effects, which can either be long- or short-term. Long-term effects include memory problems and feelings of change in personalities while short-term side-effects include a headache, muscle ache, temporary memory loss, fear, jaw muscle contraction risking tongue, lips and teeth damage.

Therefore, electroconvulsive therapy is a treatment usually administered to patients with severe depression and acute mania, especially in cases where other treatments have failed. Although some controversies exist regarding this treatment,  most studies suggest that it is effective. However, the evidence provided by such studies has been criticized on the basis of their inability to effectively allow generalization of results to the wide population. Laws and statutes to guide administration of this treatment have also been provided to reduce legal controversies. However, more research should be carried out to determine and provide a clear evidence on the safety and effectiveness of ECT.

**References**

Bailine, S., Fink, M., Knapp, R., Peptrides, G., Husain, M., Rasmussen, K., et al. (2010). Electroconvulsive therapy is equally effective in unipolar and bipolar depression. *Acta Psychiatr Scand*, *121*(6): 431-436.

Khalid, N., Atkins, M., Tredget, J., Giles, M., Champney-Smith, k., & G, K. (2008). The effectiveness of electroconvulsive therapy in treatment-resistant depression: A naturalistic study. *Journal of ECT*, *24*(2): 141-146.

MacQueen, G., Parkin, C., Marriott, M., Begin, H., & Hasey, G. (2007). The long-term impact of treatment with electroconvulsive therapy on discrete memory systems in patients with bipolar disorder. *Journal of Psychiatry & Neuroscience*, *32*(4):241-249.

Medda, P., Perugi, G., Zanello, S., Ciuffa, M., & Cassano, G. (2009). Response to ECT in bipolar I, bipolar II and unipolar depression . *J Affect Disord* , *118*(1-3): 66-69.

Mental Health America, M. (n.d). Electroconvulsive Therapy (ECT). Retrieved from http://www.mentalhealthamerica.net/ect

Mental Health Online. (2015). Additional safeguards for ECT introduced in new s58A. Retrieved from http://www.mentalhealthlaw.co.uk/Additional\_safeguards\_for\_ECT\_introduced\_in\_new\_s58A

Mental Health Organization.  (n.d). Electroconvulsive Therapy (ECT). Retrieved 17 April from https://www.mentalhealth.org.uk/a-to-z/e/electroconvulsive-therapy-ect

Ministry of Health. (2004). *Use of Electroconvulsive Therapy (ECT) in New Zealand: A Review of Efficacy, Safety, and Regulatory Controls.* New Zealand.

Missouri General Assembly. (2016). Missouri Revised Statutes: Chapter 630. Retrieved 17 April 2017 from http://www.moga.mo.gov/mostatutes/stathtml/63000001301.html

Royal College of Psychiatrists. (2015). ECT. Retrieved 17 April 2017 from http://www.rcpsych.ac.uk/mentalhealthinformation/therapies/electroconvulsivetherapy,ect.aspx?theme=mobile

Rose, D., Fleischmann, P., & Wykes, T. (2003). Patients' Perceptions on Electroconvulsive Therapy: Systematic Review. *BMJ*, 326:1363.