

Position Statement on the Use of Electroconvulsive Therapy for Major Depressive Disorder

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Citation: Alqam BM (2018) Position
Statement on the Use of Electroconvulsive
Therapy for Major Depressive Disorder. J
Psychol Brain Stud. Vol.2 No.1:1

Abstract

Major depressive disorder (MDD) is a highly prevalent disorder; the World Health Organization (WHO) expected that MDD will be the second-ranked disease burden in 2020. Electroconvulsive therapy (ECT) is one of the best therapeutic medical procedures used for treats the severe psychiatric disorders such as major depression. Using ECT to treat major depression patients is surrounding with many problems and debates. Through review the opponents and proponents of researchers about this debatable issue; ECT is considered safe and effective as well as eliminating suicide. The purpose of this position statement is to argue and support using ECT for major depressive patients. Based on this review paper, ECT should be encouraged and supported to get all the possible facilities by health care providers and health institutions in order to prevent and decrease the fatal effects of major depressive disorder. Also, health care providers should make a balance between the therapeutic effects and the side effects of ECT and should clarify this to patient as well as his family and provide clear recommendations.

Keywords: Major depression disorder; Electroconvulsive therapy; Suicide

Received: January 17, 2018; **Accepted:** January 19, 2018; **Published:** January 23, 2018

Introduction

Major depressive disorder (MDD) is a highly prevalent disorder, the World Health Organization (WHO) expected that MDD will be the second-ranked disease burden in 2020 [1]. Additionally, this disorder should be considered a life-threatening disease because several studies reported that people who suffering from major depressive disorder have decrease the overall quality of life and a higher incidence of lethal suicide attempts [2].

Major depressive disorder is one type of depressive disorders, which is characterized by discrete episodes of at least 2 weeks duration involving clear-cut changes in effect, cognition, and neurovegetative functions and inter-episode remissions [3].

Fortunately, effective treatments for major depression do exist; electroconvulsive therapy (ECT) is one of the best options for treating sever depressive symptoms in patients with major depressive disorder [4].

Wiley & Sons [5], defined electroconvulsive therapy (ECT) as a therapeutic medical procedure used for treats the severe psychiatric disorders such as major depression, mania and

psychosis, and the primary goal is to quickly and significantly alleviate psychiatric symptoms.

However, the American Psychiatric Association (APA) [6] recommends ECT as treatment of choice in major [5]. Although ECT is superior to drugs and is usually offered when their effect has been insufficient, ECT is a controversial topic. Adherents describe it as safe and effective; opponents condemn its use as damaging and ineffective [7]. The debates are varied about the benefits and harms ECT in treating patients with major depression [8].

Position statement is product developed by experts usually multidisciplinary, consists of fixed information and policies and designed to review the research literature for the purpose of advancing the understanding of a specific issue [9]. Therefore, the purpose of this position statement paper is to present opponents and proponents' viewpoints regarding to use ECT for major depression.

The current author is supporting the use of ECT in treating major depression, because several studies proposes that ECT is a safe, effective treatment, and high remission rate even for elderly patients. Spaans et al. [2] study shows that the remission rates from 73 to 90% in patients over 65 years of age.

Background

Electroconvulsive therapy (ECT) is the most controversial treatment in modern psychiatry [10]. The purpose of this literature review is pinpoint different opponents and proponents' positions regarding to use ECT in treating major depression. Unfortunately the current author did not find published literature about major depression and ECT using in Jordan.

Results

Proponents of the effectiveness of ECT in treating major depressive disorder

Although ECT does still have several side effects, with carefully calculated electrical currents administered in a controlled medical setting to achieve maximum benefits with minimal risks, and the overall treatment effect of ECT has been estimated to be 78% [5].

In clinical practice, ECT is considered in treating major depression after failure of one or more antidepressant medication trials, or when there is need for a rapid and definitive response [8], especially when a major depression patient is suicidal, psychotic, not eating, or catatonic [10].

Moreover, Wiley and Sons [5] remarks that the imminent risk of suicide in depression decreases faster with ECT than drugs and gives cause for a more prominent position of ECT in the treatment for suicidal depression.

Additionally, Spaans et al. [2] study advocate the view that ECT had a substantially higher speed of remission compared with antidepressants and it a more prominent position in the treatment of elderly patients with major depression.

According to the ECT effects on cognitive performance; the Food and Drug Administration (FDA) meta-analysis emphasized that there is no evidence that ECT effect on memory and cognitive function differs among various other psychiatric diagnoses [11]. Also, Semkovska and McLoughlin [12] systematic review of objective cognitive performance associated with ECT, the main findings indicate that cognitive deficits are limited to the first 3 days after ECT session, which return and improve to pre treatment levels over time.

Furthermore, the FDA [11] meta-analysis proposes that there is no evidence to suggest that ECT causes brain damage, as well as death; the mortality associated with ECT is not greater than that associated with minor procedures involving general anesthetics. Supporting this, the North South Wales Health (NSWH) [13] reported that in treating more than 200,000 patients with ECT, there are no deaths have been reported for the last 25 years [13].

Opponents of the effectiveness of ECT in treating major depressive disorder

ECT has various actual problems; these should be considered before undergoing the test, such as ECT is ineffective and has several side effects.

Gazdag, Bitter, Ungvari & Baran [14] reported that the claim that ECT prevents suicide is a cornerstone of the case for ECT. In the study by Bradvik & Berglund [15], suicide was less frequent after ECT than after antidepressant drugs, but there were significantly more severe suicide attempts following ECT than following antidepressants. Additionally, Read & Bentall [16] emphasized that there is no evidence at all that the ECT has any benefit for major depression patients, or that it prevents suicide.

In the other hand, few studies claims that ECT will cause suicide and patients with major disorder who had completed ECT were nearly five times more likely to kill themselves than inpatients not treated with ECT [17].

Bentall [18] further point out that the brain damage, in the form of memory dysfunction, and that it is related to ECT rather than to depression. Supporting this, Perrin et al. [19] study found that the functional connectivity of the brain was considerably decreased after ECT.

According to Read & Bentall [16] finding that the mortality rate of ECT was 1 per 91.5 patients. This finding, over 100 times greater than the one per 10,000 APA report published in 2001, which mean that ECT could be unsafe even when treating MDD.

As mentioned earlier the mortality associated with ECT and minor procedures involving general anesthetics is the same, Read & Bentall [16] argue that it ignores the fact that even if this were true for an individual ECT treatment, the risk to each ECT recipient is likely to be much greater than that of minor surgery because they receive multiple treatments (eight on average).

The current author found policy statement of ECT applied in New South Wales, published in 2011, and the purpose of this policy is to define minimum requirements that must be met in the delivery ECT. These requirements included the indications for treatment, potential risks and strategies to minimize them, issues of consent, facilities, anesthesia, application of the procedure, and the required quality improvement framework [13].

Another policy founded, is about the nursing role in ECT applied in Jeddah Psychiatric Hospital since 2010. The policy defined the nursing treatment prior, during and post ECT. Unfortunately there is no published policy of ECT founded in Jordan.

Summary and Conclusion

ECT for major depression disorder is debatable and controversial. The purpose of this literature review was pinpoint different opponents and proponents' positions regarding to use ECT in treating major depression. One of the most important debates is whether there are any benefits from this therapy or not, and if this therapy can eliminate suicide for major depressive disorder or it cause suicide. Another important debate is the balance between benefits and harms of cognition aspect, and if ECT cause severe brain damage. Finally, there is always fear that ECT is unsafe and it will cause death for patients with major depression.

Position statement

The current author is supporting the use of ECT in treating major depression, because ECT is a safe, effective treatment and high remission rate for major depression patients.

However, in order to resolve the most important problems which stand as barriers in front of using ECT to treat patients with major depression, the current research articulates the following recommendations which consists some of possible solutions for problems or barriers of using ECT to treat major depressive disorder:

1. ECT should be encouraged and supported to get all the possible facilities by health care providers and health institutions in order to prevent and decrease the fatal effects of major depressive disorder.
2. The governmental laws should support the rights of major depression patients in receiving effective and safety therapy.
3. Health care providers should work to increase the society awareness about the safety and effectiveness of ECT.
4. Health care providers should make a balance between the therapeutic effects and the side effects of ECT and should clarify this to patient as well as his family and provide clear recommendations.
5. The local and global health institutions must establishing and reviewing local operational protocols for ECT delivery.
6. The local and global health institutions should ensure that all clinicians involved in the delivery of ECT are adequately trained and/ or credentialed, as required.
7. The local and global health institutions should encourage administrative and quality improvement activities that promote the efficient running of the ECT service
8. The local and global health institutions should promote quality improvement in all facets of nursing care and evaluate nursing standards.
9. Health care provider should assess the patient's mental state, highlighting any psychotic or suicidal ideation that may compromise safety.
10. Health care provider should give the patients information on the potential side effects of ECT, particularly the possible loss of short term and recent memories around the time of ECT, and occasionally, past memories.
11. Health care provider should take due care in ensuring that patient privacy, respect and dignity is maintained at all times.
12. The local and global health institutions should assist the treating ECT medical officer with the preparation and delivery of the treatment and other clinical tasks required.
13. Health care provider should ensure that appropriate measures have been completed to assess memory and efficacy of treatment.
14. The local and global health institutions should maintain accurate statistical information and reports about ECT for service evaluation and research.

Summary and Conclusions

Using ECT to treat major depressive disorder is controversial. The purpose of this position statement paper was to present opponents and proponents' viewpoints regarding to use ECT for major depression. There are various benefits and side effects of ECT; and these should be balanced. The current author supports using ECT in treating major depressive disorder. Recommendations and possible solutions for problems facing performing ECT for major depressive were discussed.

References

- 1 World Health Organization (2004) Prevention of mental disorders: Effective interventions and policy options: Summary Report. A report of the World Health Organization Department of mental health and substance abuse; in collaboration with the prevention research centre of the Universities of Nijmegen and Maastricht.
- 2 Spaans H, Sienaert P, Bouckaert F, Julia F, BergV et al. (2015) Speed of remission in elderly patients with depression: Electroconvulsive therapy v. medication. *Br J Psychiatry* 206: 67–71
- 3 American Psychiatric Association (2013) Diagnostic and statistical manual of mental disorders , Fifth Edition. APA: Washington, DC.
- 4 Pfeiffer P, Valenstein M, Hoggatt K, Ganoczy D, Maixner D et al. (2011) Electroconvulsive therapy for major depression within the Veterans Health Administration. *Journal of Affective Disorders* 130: 21–25.
- 5 Wiley J, Sons A (2012) Evidence-based electroconvulsive therapy. *Acta Psychiatr Scand* 125: 177–184.
- 6 American Psychiatric Association (2001) The practice of ECT, a task force report, Second Edition. APA: Washington, DC.
- 7 Hicky P (2013) Is electroconvulsive therapy (ECT) Effective. *Slate*.
- 8 Tess A, Smetana W (2009) Medical evaluation of patients undergoing electroconvulsive therapy. *N Engl J Med* 360: 1437-44.
- 9 Ingravallo F, Dietrich CF, Gilja OH, Piscaglia F (2014) Guidelines, clinical practice recommendations, position papers and consensus statements: Definition, preparation, role and application. *Eur J Ultrasound* 35: 395- 399.
- 10 Reti I (2015) The electroconvulsive therapy today. *J Neurochem* 125: 120-137.
- 11 Food and Drug Administration (2011) ECT executive summary.
- 12 Semkovska M, McLoughlin DM (2010) Objective cognitive performance associated with electroconvulsive therapy for depression: A systematic review and meta-analysis. *Biol Psychiatr* 68: 568-577.
- 13 North South Wales Health (2011) Electroconvulsive therapy: ECT minimum standard of practice in NSW. North South Wales: Author.
- 14 Gazdag G, Bitter I, Ungvari G, Baran B (2009) Convulsive therapy turns 75. *Br J Psychiatry* 194: 387-388.

- 15 Bradvik L, Berglund M (2006) Long-term treatment and suicidal behavior in severe depression: ECT and antidepressant pharmacotherapy may have different effects on the occurrence and seriousness of suicide attempts. *Depress Anxiety* 23: 34-4.
- 16 Read J, Bentall R (2010) The effectiveness of electroconvulsive therapy: A literature review. *Epidemiol Psychiatr Soc* 19: 333-347.
- 17 Munk-Olsen T, Laursen T, Videbich P, Mortensen P, Rosenberg R (2007) All-cause mortality among recipients of ECT. *Br J Psychiatry* 190: 435-439.
- 18 Bentall R (2009) *Doctoring the mind: Why psychiatric treatments fail*. Penguin: London.
- 19 Perrin J, Merz S, Bennett D, Currie J, Steele D et al. (2012) Electroconvulsive therapy reduces frontal cortical connectivity in severe depressive disorder. *Proc Natl Acad Sci U S A* 109: 5464–5468.