

# **Quality of Life after ECT in Bipolar Manic Patient**

## *Thesis*

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## List of Abbreviations

|                         |  |
|-------------------------|--|
| <b>APD</b>              | Antipsychotic Drugs.   |
| <b>BD</b>               | Bipolar Disorder.  |
| <b>CGI</b>              | Clinical Global Impression scale                                   |
| <b>CGI-I</b>            | Clinical Global Impression – Improvement scale.                    |
| <b>CGI-S</b>            | Clinical Global Impression – Severity scale.                       |
| <b>CTG</b>              | Combined Treatment Group.  |
| <b>DSM-IV</b>           | Diagnostic and Statistical Manual of Mental Disorders, 4th edition |
| <b>ECT</b>              | Electroconvulsive Therapy.   |
| <b>FH</b>               | Family History.  |
| <b>GAF</b>              | Global Assessment of Functional Scale                              |
| <b>HAM-D</b>            | Hamilton Depression Rating Scale                                   |
| <b>HRQOL</b>            | Health Related Quality Of Life.                                    |
| <b>MDD</b>              | Major Depressive Disorder.   |
| <b>MS</b>               | Mixed State.   |
| <b>NIMH</b>             | National Institute of Mental Health.                               |
| <b>OCD</b>              | Obsessive Compulsive Disorder.                                     |
| <b>PCASSE</b>           | PCASSE Quality of life questionnaire.                              |
| <b>PH<br/>substance</b> | past history of substance abuse.                                   |
| <b>PTG</b>              | Pharmacotherapy group.   |
| <b>QOL</b>              | Quality of life.   |

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***Introduction***

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|               |  |
|---------------|--|
| <b>SCIDI</b>  | Structured Clinical Interview for DSM-IV.                    |
| <b>SCIDII</b> | Structured Clinical Interview for DSM-IV                     |
| <b>SF-12</b>  | The Medical Outcomes Study 12-Item Short-Form Health survey. |
| <b>SF-36</b>  | Medical Outcomes Study 36-Item Short-Form Health Survey.     |
| <b>SUD</b>    | Substance abuse disorder.                                    |
| <b>WHO</b>    | World health organization.                                   |
| <b>YMRS</b>   | Young Mania Rating Scale.                                    |

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## INTRODUCTION

Bipolar disorder, also known as bipolar affective disorder and manic-depressive illness, is a mental disorder characterized by periods of elevated mood and periods of depression (**American Psychiatry Association, 2013**).

WHO ranks Bipolar disorder among the top twenty leading causes of disability worldwide, and as a severity class seven disability (active psychosis along with quadriplegia and terminal stage cancer), and as the seventh leading cause for men, eighth leading cause for women for years lost due to disability (YLD) globally. It is also one of the top ten leading causes of disease burden (DALY) for women aged 15–44 years worldwide (**WHO, 2004**).

Quality of life has gained increasing attention as an important component of functional outcome in bipolar disorder. In fact, recovery in Bipolar disorder should not be defined merely by symptomatic remission or even syndromal remission; rather, it should include symptomatic recovery, syndromal recovery, functional recovery, and a return to an acceptable quality of life for the patient (**Mazza et al., 2009**).

Patient outcome in bipolar disorder has traditionally been determined by the assessment of objectively measured clinical information, such as rates of relapse, the number of



times a patient is hospitalized, or degree of symptom reduction on clinician-rated assessment scales such as the Hamilton Depression Rating Scale (HAM-D) or Young Mania Rating Scale (YMRS) (**Rosa et al., 2009**). More recently, however, there has been discussion about the need for additional forms of assessment to measure response to treatment in bipolar populations. It was suggested that functional outcomes are more meaningful measures of response to treatment for bipolar disorder than are scores on various psychiatric rating scale. (**Michalak et al., 2010**).

Symptomatic recovery can be defined as eight continuous weeks during which the patient experienced minimal or no psychiatric symptoms, and syndromal recovery can be defined as eight continuous weeks during which the patient no longer meets the criteria for manic, mixed or depressive syndromes. While functional recovery can be defined as return to pre morbid level of functioning for at least eight continuous weeks (**Mansour et al., 2002**).

Effective treatment from a perspective is now regarded as the reduction of symptoms without compromising the patients' Quality of life. (**Brissos et al., 2008a**).

Electroconvulsive therapy (ECT) was initiated 75 years ago in Rome, when for the first time, Cerletti and Bini

used electricity to evoke convulsive seizures in a patient experiencing a mixed state (MS) with psychotic symptoms. This patient then exhibited an improvement after a single session, recovered after 11 sessions, and was found to be well balanced at a 1-year follow-up. **(Shorter and Healy, 2007)**. Since then, ECT remains the most commonly used physical treatment for mood disorders, as it is highly effective for the acute phases of depressive, manic, and mixed episodes of bipolar disorder. **(Valenti et al., 2008)**.

For these unique therapeutic characteristics and according to Goodwin and Jamison's definition, ECT may be considered the first treatment that displays mood-stabilizing properties because its use was initiated 10 years before the discovery of lithium salts **(Goodwin and Jamison, 2007)**.

Mania is the third most common indication for ECT following psychotic depression and catatonic schizophrenia in some centers **(Gill and Lambourn, 1979; Vanelle et al., 2008)**. In a survey of the practice of ECT in Asia **(Chanpattana et al., 2009)**, schizophrenia (41.8%) and major depression (32.4%) were the major indications for ECT followed by mania (14%).

ECT is as effective as or more efficacious than medications, including lithium, chlorpromazine and their combination. Further, it seems to reduce the duration of

hospitalization (**McCabe, 1976**) and to delay rehospitalization (**Thomas and Reddy, 1982**).

In studies, which compared ECT and medications (**Small et al., 1988; Volpe et al., 2003**), those with violent and severe mania, psychotic features, worse chronicity indices (more episodes, longer durations), catatonia and mixed episodes had particularly better response to ECT than to medications

Overall, though research on the use of ECT in mania is limited, ECT has been accepted as being highly effective, with 80% of the cases remitting or showing marked clinical improvement (**Mukherjee et al., 1994; Rey and Walter, 1997**).

Guidelines (**American Psychiatric Association, 2001; National Institute for Clinical Excellence, 2003; Scott, 2005**) recommend the use of ECT in treating manic episodes only when the condition is considered potentially life threatening (e.g., from physical exhaustion) or when the condition remains resistant to pharmacological treatment..

However, in many countries it is used quite frequently for less severe conditions also. This is partly because of the conjecture that ECT brings about faster response in acute mania, in turn reducing the dosage of medications and duration of inpatient stay (**Hiremani et al., 2008**).

An emerging literature demonstrates the importance of ECT in restoring function and health related quality of life in bipolar disorder and results in a net improvement in function and quality of life for a period of at least 1 year after treatment (McCall et al., 2004) but Unfortunately, not all patients benefit from ECT and mania or depressive relapse are common after acute response, leading to a loss of improvement in quality of life (McCall et al., 2011).

### **Rationale of the work**

ECT was widely used in clinical practice in treatment of bipolar disorder, So it is important to high light efficiency of ECT in reducing symptom of mania. So it is important to explore if addition of ECT could enhance the quality of life in manic patient.

### **Hypothesis**

ECT could improve QOL in patients with Bipolar Affective disorder.

## **AIM OF THE WORK**

**The aim of this work was to:**

- 1- Compare quality of life in patients with Bipolar disorder who received ECT plus medications versus those who received medications only after 2 and 4 weeks.
- 2- Compare short term outcome between manic patients received medication and ECT versus those who received medications only.

## **QUALITY OF LIFE IN BIPOLAR DISORDER**

Bipolar disorder (BP) is a common, chronic and severe mental disorder characterized by recurrent episodes of depression as well as mania or hypomania. Bipolar I is classically defined by the presence of mania that is often of psychotic proportions, other patients begin with a mixture of depression and mania. In Bipolar II, the hallmark is recurrent depression with hypomania (**Keck et al., 2008**). Also; Bipolar disorder is a chronic psychiatric disorder patients' social, occupational and general function with a variable course and significant impact on and wellbeing (**Dean et al., 2005**).

Outcome in bipolar disorder (BD) has traditionally been assessed via objectively measured clinical information, such as rates of relapse or degree of symptom reduction on clinician-rated assessment scales. More recently, however, there has been discussion of the need for additional forms of assessment to measure treatment outcome or recovery (**Keck, 2004**), for example, has argued, "Functional outcomes are more meaningful measure-s of response to treatment for bipolar disorder than are scores on various psychiatric rating scales."

The assessment of psychosocial functioning usually involves evaluation across one or more behavioral domains, such as the individual's ability to function socially or occupationally or to live independently, with functional recovery typically being defined as restoration of normal role functioning in the domains under scrutiny (**Mintz et al., 1992**).

Quality of life, as defined by the WHO, is a broad ranging concept which considers the individual's perception of his or her position in life, within the cultural context and value system where he or she lives in, and in relation to his or her goals, expectations, parameters, and social relations (The WHOQOLGroup, 1995). In clinical research the assessment of QOL has been considered a useful measure of both functional (**Yatham et al., 2004**) and symptomatic (**Thunedborg et al., 1995**) recovery and impairment in mental care settings.

It is important to note that QOL measures do not represent a replacement for traditional symptom outcome measures, or indeed measures of functioning. Instead, "recovery should not be defined merely by symptomatic remission or even syndromal remission; rather, recovery should include symptomatic recovery, syndromal recovery, functional recovery and a return to an acceptable quality of life for the patient" (**Harvey, 2006**).