

# An audit on the prescription and administration of ECT at NIMH, Sri Lanka

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## Background

Audits on the practice of electroconvulsive therapy (ECT) have shown deficiencies in meeting expected standards and have highlighted the auditing of ECT as being essential for quality improvement.

## Aims

To evaluate the practice of ECT at the National Institute of Mental Health (NIMH) Colombo, against the guidelines of the Royal College of Psychiatrists, UK and the Royal Australian and New Zealand College of Psychiatrists.

## Methods

An audit was carried out in a consecutive sample of 111 patients. Data was collected from the patients' clinical records using a specifically designed instrument, based on the guidelines.

## Results

The mean age of the sample was 39.9 years and 44% were males. The most commonly noted diagnosis was

schizophrenia (37%) and failure to respond to first line treatment (33%) was the most frequent indication (irrespective of diagnosis) for administration of ECT.

There were many inadequacies in the administration of ECT, including poor documentation of indication for ECT, inadequate monitoring of motor seizures, lack of adherence to recommended guidelines regarding modifications and poor maintenance of records. Only 50% of patients had developed a motor seizure of >20 seconds, and the average energy dose increment was 5% in subsequent ECTs. Post-ECT assessment was sub-standard in up to 78%.

## Conclusion

We recommend formulating institutional guidelines in Sri Lanka to improve the administration of ECT, followed by a continuation of the audit for re-evaluation of the procedure of ECT.

**Key words:** ECT, audit, indications, administration

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## Introduction

Electroconvulsive therapy (ECT) was introduced as a method of treatment for patients with psychiatric disorders by Cerletti and Binni in 1938 and its use spread rapidly; it was seen as the first effective, reliable and inexpensive treatment modality for major psychiatric disorders (1). This led to a period of indiscriminate use and misuse of ECT, particularly during the mid-20<sup>th</sup> century, resulting in ECT acquiring a bad reputation and adverse public perception (1). Early adverse effects experienced due to unmodified ECT, such as tongue bites, fractures and broken teeth caused by the induction of generalized seizures, made ECT a high risk procedure in the early days. However, after the introduction of general anaesthesia and muscle relaxants, those severe complications disappeared (1).

By 1940, ECT was beginning to be used in Sri Lanka (2) and an electrical treatment centre was opened at then Mental Hospital Angoda during this period (2). Initially, ECT was administered without general anaesthesia and later under anaesthesia administered by a trained medical officer. Initially the anaesthesia was limited to administration of thiopentone without use of muscle relaxant. Much progress has been made since those early

days, and currently ECT is administered at NIMH with EEG monitoring, using a modern Thymetron machine at a specialised unit.

Hospital data show that 826 electroconvulsive treatments are administered monthly at NIMH on an average of 152 patients. However, many deficiencies have been observed in administration of ECT at NIMH. Similarly, even audits conducted internationally indicate inadequacies in techniques of administration of ECT and post-ECT assessment (3, 4). A study done in Sri Lanka has shown that informed consent was not taken in 70% of the patients and understanding of the treatment was poor in 75% of patients (5).

The objective of this study is to evaluate the practice of ECT at NIMH with reference to recommendations of current guidelines and accepted practices, with a view to improving the quality of service provided.

## Methodology

An audit was carried out on a consecutive sample of 111 patients who received ECT at NIMH during March 2012. Data was extracted from the clinical records using a