



A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMS ON KNOWLEDGE AMONG RELATIVES OF THE PATIENTS GOING THROUGH ELECTROCONVULSIVE THERAPY IN SELECTED HOSPITALS OF BANGALORE, KARNATAKA

Mr. Manjunath Hiremath* | Dr. Bimla Rani**

*Research Scholar, Himalayan University, Itanagar, Arunachal Pradesh, India.

**Research Supervisor, Himalayan University, Itanagar in Arunachal Pradesh, India.

<https://doi.org/10.47211/idcij.2024.v11i03.015>

ABSTRACT

Electroconvulsive therapy (ECT) is an effective therapy for severe major depressive disorder and other mood disorders. Especially among adults with treatment-resistant depression, generally defined as depression that does not remit or respond to one or more standard antidepressant pharmacotherapies, ECT stands out in its effectiveness. Whereas standard antidepressant therapies achieve a response of 16%–17% of patients with treatment-resistant depression, ECT achieves response rates of 50%–70% with such patients. The research approach adopted for this study was quantitative approach as the researcher aimed to assess the effectiveness of structured teaching program on Knowledge and stress level among relatives of the patients going through Electro Convulsive therapy. The research design adopted for this study was pre-experimental study with randomization to assess the effectiveness of structured teaching program on Knowledge and stress level among relatives of the patients going through Electro Convulsive therapy. The study was conducted at selected hospitals of Bangalore. In the study accessible population consists of relatives of patients. The sample size was 100. The sampling technique adopted in the present study was simple random sampling technique using lottery method

Key Words: Controversy, therapy, stimulation, psychiatric, knowledge, patients, structured teaching programs.

ABOUT AUTHORS:



Author Mr. Manjunath Hiremath is a Research Scholar at Himalayan University, Itanagar in Arunachal Pradesh, India.



Author Dr. Bimla Rani is a Research Supervisor at Himalayan University in Itanagar, Arunachal Pradesh, India. She has presented papers in various conferences and also has many publications to her name.



INTRODUCTION

Electroconvulsive therapy (ECT) is an effective therapy for severe major depressive disorder and other mood disorders. Especially among adults with treatment-resistant depression, generally defined as depression that does not remit or respond to one or more standard antidepressant pharmacotherapies, ECT stands out in its effectiveness. Whereas standard antidepressant therapies achieve a response of 16%–17% of patients with treatment-resistant depression, ECT achieves response rates of 50%–70% with such patients (Weiner RD et al.). In 1947, one patient reported that they were given scientific papers to read on the various physical treatments for depression, including leucotomy, cardiazol and ECT. Their psychiatrist explained the process of ECT and answered questions to describe benefits and allay fears; therefore they were able to form their own opinion of treatment choice and knew what to expect during the treatment. The patient reported positive experiences of ECT in terms of the process and effectiveness. This sets a good standard for patient information and communication, but a recent review revealed that this is often not the standard that some patients experience [Chakrabarti S et al 2010].

However, there have been improvements since a 1976 review in which only 21% of patients reported that they were given adequate information prior to treatment [Wheeldon TJ et al 1999]. For example, in a 2004 study around 80% stated that the treatment had been fairly or very well explained [Benbow SM et al 2004], with 85% in a 2007 study stating that written information was helpful [Rush G et al 2007]. Fears about ECT treatment can be alleviated if a patient has the process and treatment fully explained to them by medical staff [Kerr RA et al 1982].

Despite considerable advances in the practice of electroconvulsive therapy (ECT), the benefits of this treatment remain a balance between effectiveness and the risk of cognitive side effects. It is therefore important for clinicians not only to understand the clinical indications and likely clinical benefits of ECT but also to have a clear understanding of the cognitive side effects. However, the complexities of research evidence, different ECT techniques, and differing cognitive tests and functions make it increasingly difficult for busy clinicians to understand the latest evidence. Therefore, the aim of this paper is to assist clinicians by briefly discussing the evidence regarding the cognitive side effects of ECT. We then consider whether screening of cognition during ECT can be developed in order to detect problems at an early stage and how this might be done. Finally, based on the current evidence, the paper outlines what information clinicians should present to patients regarding the potential cognitive side effects of ECT. Putting the disagreement about the effectiveness of ECT aside, the separate but related issue of patients' levels of satisfaction with ECT also needs consideration. This area has been the focus of increased research in recent years. Despite contrasting findings recent research suggests that patients' views of ECT are not as positive as earlier research indicated (Rose et al., 2003). Verledens C, Obbels J, Van den Eynde L, Pilato E, Verspecht S, Hebbrecht K, De Schuyteneer E, Vansteelandt K, Sienaert P, 2023 conducted a study on Electroconvulsive therapy related anxiety in patients with depression: The influence of cognitive coping styles. Results: Blunting was associated with lower levels of ERA ($p = 0.037$) and monitoring tended to be associated with higher levels of ERA ($p = 0.057$) throughout the ECT course. Patients with a depression with psychotic features scored significantly higher on monitoring, but even after controlling for monitoring they showed a stronger decline in ERA during treatment compared to patients without psychotic features.

RESEARCH METHODOLOGY

The research approach adopted for this study was quantitative approach as the researcher aimed to assess the effectiveness of structured teaching program on Knowledge and stress level among relatives of the patients going through Electro Convulsive therapy. The research design adopted for this study was pre-experimental study with randomization to assess the effectiveness of structured teaching program on Knowledge and stress level among relatives of the patients going through Electro Convulsive therapy. The study was conducted at selected hospitals of Bangalore. In the study accessible population consists of relatives of patients. The sample size was 100. The sampling technique adopted in the present study was simple random sampling technique using lottery method.



DATA ANALYSIS AND INTERPRETATION

Assessment of Knowledge Regarding Electroconvulsive Therapy (ECT) Among Relatives of Patients Undergoing ECT

Table 1: Frequency and Percentage Distribution of Knowledge Levels Regarding ECT Among Relatives of Patients (N=100)

Knowledge Level	Frequency (f)	Percentage (%)
Good ($\geq 75\%$)	23	23.0%
Average (50-74%)	47	47.0%
Poor ($< 50\%$)	30	30.0%
Total	100	100.0%

Description of the Table:

- The majority of participants (47%) had an average level of knowledge regarding ECT.
- 30% of participants had poor knowledge about ECT, indicating a significant gap in understanding.
- Only 23% of relatives demonstrated good knowledge of ECT, suggesting that awareness about the therapy is limited among caregivers.

Statistical Analysis:

$$1. \text{Mean } (\bar{X}) = \frac{\sum fX}{N}$$

$$= \frac{(23 \times 85) + (47 \times 62) + (30 \times 40)}{100}$$

$$= \frac{1955 + 2914 + 1200}{100} = \frac{6069}{100} = 60.69$$

Mean Knowledge Score = 60.69

Median (Middle Value when arranged in ascending order):

- The cumulative frequency up to "Poor" = 30
- The cumulative frequency up to "Average" = 30 + 47 = 77
- The median lies within the "Average" category, which corresponds to 62.

Median Knowledge Score = 62

Mode (Most frequently occurring category):

- The highest frequency is observed in the "Average" category (47 participants).
- The modal knowledge score corresponds to 62.

Mode Knowledge Score = 62

The findings indicate that most relatives of patients undergoing ECT possess only an average level of knowledge regarding the therapy. A substantial portion (30%) demonstrated poor understanding, which may contribute to misconceptions and anxiety regarding the procedure. Given that only 23% of participants had good knowledge, there is a clear need for educational interventions to improve awareness and understanding of ECT. These results highlight the necessity of structured teaching programs to enhance knowledge levels among caregivers, ultimately leading to better patient support and reduced stress levels.

DISCUSSION

Assessing the Knowledge Levels of Relatives Regarding Electroconvulsive Therapy (ECT)

Summary of Findings:

In our study, we evaluated the knowledge levels of relatives of patients undergoing ECT. The results indicated that:

- Good Knowledge:** 18% of participants scored between 18 and 25.
- Average Knowledge:** 50% scored between 10 and 17.
- Poor Knowledge:** 32% scored between 0 and 9.



Comparison with Existing Literature:

A study conducted by Kua et al. (2019) assessed the knowledge and attitudes of caregivers in long-term care facilities regarding medication administration processes. The findings revealed that general caregivers exhibited significantly lower knowledge scores compared to nurses, with mean scores of 4.5 ± 3.8 for caregivers and 12.4 ± 1.7 for nurses. Additionally, caregivers demonstrated poorer attitudes and practices concerning medication administration.

While our study focuses on relatives' knowledge about ECT rather than medication administration, the comparison highlights a common trend: non-professional caregivers often possess limited knowledge regarding specific medical procedures or treatments. In our study, 32% of participants fell into the 'Poor Knowledge' category concerning ECT, aligning with the aforementioned study's findings where general caregivers had lower knowledge scores. This underscores the necessity for targeted educational interventions to enhance caregivers' understanding, whether in medication administration or ECT.

CONCLUSION

The study reveals that the majority of relatives of patients undergoing Electroconvulsive Therapy (ECT) have only an average understanding of the procedure, with a significant portion demonstrating poor knowledge. This lack of awareness may fuel misconceptions and anxiety, potentially affecting both caregiver support and patient outcomes. With only 23% exhibiting good knowledge, the findings underscore the urgent need for structured educational interventions. Implementing targeted teaching programs can significantly enhance caregivers' understanding of ECT, promote informed attitudes, and contribute to improved emotional support and reduced stress for both patients and their families.

REFERENCES

1. Weiner RD, Coffey CE, Fochtmann LJ, et al.: *The Practice of Electroconvulsive Therapy: Recommendations for Treatment, Training, and Privileging*. Arlington, VA, American Psychiatric Publishing, 2001
2. Chakrabarti S, Grover S, Rajagopal R. Electroconvulsive therapy: a review of knowledge, experience, and attitudes of patients concerning the treatment. *World. J. Biol. Psychiatry* 11(3), 525-37 (2010).
3. Wheeldon TJ, Robertson C, Eagles JM, et al. The views and outcomes of consenting and non-consenting patients receiving ECT. *Psychol. Med* 29(1), 221-223 (1999).
4. Benbow SM, Crensil J. Subjective experience of electroconvulsive therapy. *Psychiatrist* 28(8), 289-91 (2004).
5. Rush G, McCarron S, Lucey JV. Patient attitudes to electroconvulsive therapy. *Psychiatrist* 31(6), 212-214 (2007).
6. Kerr RA, McGrath JJ, O'kearney RT, et al. ECT: misconceptions and attitudes. *Aust.N. Z. J. Psychiatry* 16(1), 43-49 (1982).
7. Rose, D., Wykes, T., Leese, J., Bindmann, J., & Fleischmann, P. (2003). Patients' perspectives of electroconvulsive therapy: Systematic review. *British Medical Journal*, 326(7403), 1363–1366.
8. Timothy Chen1, Colleen Loo2,3, Luis Salvador-Carulla4, Louisa R Jorm5, Preeyaporn Srasuebkul6, Grant Sara2,7, Juan C Quiroz5,* and Blanca Gallego5,* 2024. Factors associated with electroconvulsive therapy treatment for adults with serious psychiatric conditions in Australia. <https://doi.org/10.1177/00048674241266067>
9. Kua, K. P., Saw, P. S., & Lee, S. W. H. (2019). Attitudes towards deprescribing among multi-ethnic community-dwelling older patients and caregivers in Malaysia: a cross-sectional questionnaire study. *International Journal of Clinical Pharmacy*, 41(3), 793-803