

# A Study to Assess the Effectiveness of Planned Teaching Program on Knowledge Regarding Electro Convulsive Therapy among Patient's Relatives Undergoing ECT in Selected Hospitals in Vadodara

Kiran Patel<sup>1</sup>, Seema Boreas<sup>2,3</sup>, Mural Christian<sup>3</sup>

<sup>1</sup>Assistant Professor; <sup>2,3</sup>M.sc Nursing Tutor, Dinsha Patel College of Nursing, Nadiad

## Abstract

**Background of Study:** Electroconvulsive therapy (ECT) is a safe and efficacious treatment; there is a widespread negative view of electroconvulsive therapy in public and professional circles. Clinical experience and research have resulted in continued improvements to the efficacy and safety of electro convulsive therapy. It is necessary to conduct research on this basis to modify the misconceptions and prejudices about the electroconvulsive therapy<sup>1</sup>.

**Objectives:** 1. To assesses the existing level of knowledge regarding electro convulsive therapy among patient's relatives undergoing ECT. 2. To determine the effectiveness of planned teaching on knowledge regarding electro convulsive therapy among patient's relatives undergoing ECT. 3. To find out association between pre test knowledge scores of patients relatives with their selected demographic variables.

**Methodology:** Quantitative Research Approach was use with 2 Group pre test & Post test Design. The investigator used pre-experimental one group pre-test post-test research design. Purposive sampling technique used for Selecting 30 Samples. The Structural questioners Used Check knowledge of ECT before & after administration of planned teaching program.

**Results:** Analysis of paired t test is done to assess the effectiveness of planned teaching on knowledge regarding electroconvulsive therapy. Researcher has found t value= 24.853 thus the obtained t value in this study is more than the table value of t test at 0.05 level of significance. Hence the obtained t value is significant. So it reveals that planned teaching on knowledge regarding electroconvulsive therapy is improved in knowledge among patient's relatives.

**Key words:** Effectiveness, Planned Teaching Program, Knowledge, Electro Convulsive Therapy

## Introduction

Mental illness is shrouded in the gloom of ignorance, superstition, feeling of mystery and fear among the

public. Many mental ill patients are taken to different healers and religious places where they usually undergo torturous procedures. Often the family spends most of its income in seeking relief from various other sources before coming to mental hospital; by this time mental illness would have reached an advanced stage and the family members have lost all their hopes. With the emergence of biological psychiatry and the growing knowledge bases in the neurosciences, interest has increased in treatment resistant psychiatric disorders and refinement in treatment techniques have placed greater emphasis on evaluating the indications for and efficacy of somatic therapeutic interventions.

---

### Corresponding author:-

**Ms. Seema Boreas**, M.sc Nursing Tutor, Dinsha Patel College of Nursing, Nadiad,  
Email Id: seemaboresasb@gmail.com  
Address:- Dinsha Patel College of Nursing, Behind Hyundai Showroom, College road, Nadiad, District-Kheda, Gujarat-387001.

Electroconvulsive therapy is a type of somatic treatment in which electric current is applied to the brain through the electrodes placed on the temples of the patient. 200-1600mA of electric current is passed for 0.7-1.5 seconds.<sup>2</sup>

Electroconvulsive treatment (ECT) is a powerful non-pharmacological mediation utilized for treatment in psychiatry. It offers a helpful, safe, and sometimes, life-sparing intercession, during which a minuscule electrical flow is applied to the patient's cerebrum through terminals. The current delivers a seizure enduring from 30 s to 1 min .The actuated convulsive seizures in neurons in the whole mind mitigate indications of issues, for example, significant discouragement, intense hyper scenes, schizophrenia, or schizoaffective problem.<sup>3</sup>

### Methodology

**Research Approach:-**Quantitative research approach

**Research Design:-** Pre-experimental, one group pre-test and post-test.

**Sampling method:-**Purposive sampling technique

**Study population:** - Relatives of patients are undergoing ECT in selected mental hospitals in Vadodara.

**Study Setting:** Selected mental hospital in Vadodara.

**Study Size:** - The sample size of the study was 30 relatives of the patients undergoing ECT

### Results

Association of age in years with the patients relatives

score the calculated value of chi-square is 1.45 less than the table value of chi-square 3.18 , at the 3 degree of freedom and  $P < 0.05$  level of significance. Therefore, age is non-significant with the score of patient's relatives.

Association of sex (Gender) the patients relatives score, calculated value of chi-square is 1.152 less than the table value of chi-square 12.71, at the 1 degree of freedom and  $P < 0.05$  level of significance. Therefore, gender is non-significant with the patients relatives score.

Association of patients relatives score, calculated value of chi-square is 6.11 more than the table value of chi-square 3.18, at the 3 degree of freedom and  $P < 0.05$  level of significance. Therefore, patient's relatives' education score is significant.

Association of occupation of the family, calculated value of chi-square is 2.49 less than the table value of chi-square 12.71, at the 1 degree of freedom and  $P < 0.05$  level of significance. Therefore, Occupation of family is Non significant with the patients relatives score.

Association of type of family with the patients relatives score, calculated value of chi-square is 0.000 less than the table value of chi-square 12.71, at the 1 degree of freedom and  $P < 0.05$  level of significance. Therefore, type of family is no significant with the patients relatives score.

Association of relation with the patients relatives score, calculated value of chi-square is 0.67 less than the table value of chi-square 3.18, at the 3 degree of freedom and  $P < 0.05$  level of significance. Therefore, relation with patient non-significant with the patients relatives score.

**Table 1: Frequency and percentage distribution of Demographic Data:**

Sr. No.	Demographic variables	Frequency	Percentage
1.	Age of patients relatives		
	a) 18-30	08	26.7%
	b) 31-40	06	20.0%
	c) 41-50	09	30%
	d) Above 50	07	23.3%
2.	Sex	Frequency	Percentage
	a) Male	19	63.3%
	b) Female	11	36.7%
3.	Education	Frequency	Percentage
	a) Illiterate	0	0%
	b) Primary and secondary	13	43.3%
	c) Graduate	17	56.7%
	d) Post graduate	0	0%

4	Occupation	Frequency	Percentage
	a) Employment	19	63.03
	b) Unemployment	11	36.07
5.	Types of family	Frequency	Percentage
	a) Nuclear family	09	30%
	b) Joint family	21	70%
6.	Relation with patients	Frequency	Percentage
	a) Parents	03	10%
	b) Husband or wife	12	40%
	c) Family relatives	15	50%
	d) Neighbor	0	0%

**Table: 2 Frequency and percentage distribution in pre-test and post-test level of knowledge among patient's relatives regarding electroconvulsive therapy.**

knowledge of patients relatives	Pre-test		Post test	
	f	%	f	%
Inadequate	10	33.3%	0	0
Moderately adequate	20	66.7%	04	13.33%
Adequate	0	0%	26	86.67%
Total	30	100%	30	100.0

Pre test depicts that prior to the knowledge regarding ECT majority 20(66.7%) patients relatives had moderately adequate level of knowledge (score: 11-20) while 10 (33.3%) patients relatives had inadequate level of knowledge (score: 0-10) and 0(0%) patients relatives had adequate level of knowledge (score: 21-30) in particular study.

Post test depicts that prior to the knowledge on ECT majority 26 (86.67%) patients relatives had adequate level of knowledge (score: 21-30) while 04 (13.33%) patients relatives had moderately adequate level of knowledge (score: 11-20) in particular study.

**Table-3 Mean standard deviation, mean difference and 'T' value of pre- test and post test scores.**

Variables		Mean	Mean difference	Std. Deviation	t-value
Knowledge of patients relatives	Pre-test	11.43	8.57	1.88	24.853 < 2.05
	Post-test	20.00		.0000	Df = 29

Level of Knowledge of patients relatives is with the maximum possible score of Mean pre-test was 11.43, SD is 1.88 and, Mean post-test is 20.00, SD is .0000 and comparison between pre and post-test level 8.57 Knowledge of patients relatives score of the sample was shows the paired 't' value as 24.853 (Significant at the  $p < 0.05$  level). The mean post-test knowledge score regarding electroconvulsive therapy among patients relatives significant higher than there mean pre-test score.

## Conclusion

The present study was done to find out the effectiveness of planned-teaching program on knowledge regarding electroconvulsive therapy among patient's relatives undergoing ECT in selected hospitals in Vadodara.

Conclusion drawn based on the finding of the study revealed the Pre – test knowledge score of patient's relatives regarding" electroconvulsive therapy" undergoing ECT was poor. Planned-teaching program by the investigator was found to be effective in improving the knowledge of patient's relatives.

Planned-teaching program is effective method. There was no significant relationship between pre test knowledge score and selected variable like age, gender, occupation, Types of family, relation with patients there is only significant with education of the patient's relatives. Therefore it could be concluded that planned-teaching program can help in improving the knowledge of patient's relatives and could be used in various settings. It can be concluded that there is no significant association between knowledge and selected demographic variable.

The analysis has been organized and presented under various sections like description of demographic variables, description of pre-test knowledge score, comparison of pre-test and post-test knowledge score and association between the post-test knowledge score and selected demographic variables. It is found that post-test knowledge score is higher than the pre-test knowledge score so it indicate planned teaching program was effective.

**Conflict of Interest:** Nil

**Source of Funding:** College Management

**Ethical Clearance:** The study was approved by the research committee, IEC – DPCN/1<sup>st</sup> IEC/2018-19/09

and a formal written permission was gathered from the hospital, Vadodara.

**Statement of Informed consent:** Informed consent was acquired from the participants

## References

1. Chavan, B.S. et al . "ECT knowledge and attitude among patients and their relatives." *Indian journal of psychiatry* 48.1 (2006): 34-38 PMC .web. 4 Nov.2017. Available from: <http://www.ncbi.nlm.nih.gov/pmc/articles/pmc/articles/pmc2913640/#/CIT3>
2. Nurnahar Ahmed ,Arunjyoti Baruah, Awareness about mental illness among the family members of persons with mental illness in a selected district, 2017 volume: 33 page- 171-178. Available from: [www.journalofscience.net/phyllips pradhan et al/journal](http://www.journalofscience.net/phyllips%20pradhan%20et%20al/journal).
3. Bolwing, T.(2011)." How does electroconvulsive therapy work? Theories on its mechanism." *The Canadian journals of psychiatry*. 56(1): P- 13-18. Available from: [http://yengage.yenepoya.edu.in/idata/YenepoyaUniversity/ilFile/1/79/file\\_17907/001/attachment\(1\).pdf](http://yengage.yenepoya.edu.in/idata/YenepoyaUniversity/ilFile/1/79/file_17907/001/attachment(1).pdf)
4. Electroconvulsive therapy from Wikipedia, the free encyclopedia. Available from: [www/en Wikipedia,org/wiki/electroconvulsive therapy](http://en.wikipedia.org/wiki/electroconvulsive_therapy).
5. Ramachandra ZZ , B. N. Gangadhar , Lalitha ZZ , N. Janakiramaiah , B. S. Shivananda Patients' and patient relatives Knowledge about ECT Volume 10, Issue 1, January 1992 > ZZ.Available from: <http://52.172.159.94/index.php/nimhans/article/view/33065>