A Study to Assess the Effectiveness of Psychoeducation on Knowledge and Attitude towards Electroconvulsive Therapy among the Care Givers of Mentally Ill Patients at Gauhati Medical College & Hosptital, Guwahati, Assam

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Abstract: *Electroconvulsive therapy (ECT) is one of the oldest treatments in psychiatry, which has survived the test of time. Most of the studies noted that patients and their relatives had many misconceptions as well as a negative attitude towards the use of ECT. Fewer studies have evaluated the knowledge and attitude concerning ECT among mentally ill patients who have not received ECT and their relatives. This is an important group not only because they might be potential candidates for ECT, but they may also influence perception of other patients regarding ECT. The objectives of the study is to find out the effectiveness of psychoeducation on knowledge and attitude towards Electroconvulsive Therapy among the care givers of mentally ill patients The study adopted a quantitative study, pre-experimental research design (one group pre test and post test) research design, 60 samples were selected by using convenience sampling technique. Self-structured knowledge questionnaire and 5point Likert scale were used to assess knowledge and attitude towards Electroconvulsive therapy. The results revealed that before psychoeducation majority 37(61.7%) of participants had inadequate knowledge whereas after psychoeducation majority 35(58.3%) of participants had adequate knowledge towards electroconvulsive therapy. Findings also showed that before psychoeducation mean knowledge score was 10.08±3.326 and after psychoeducation mean knowledge score was 20.17±4.934 with mean difference was 10.08. The results also revealed that before psychoeducation majority 33(55%) of participants had unfavorable attitude while after psychoeducation majority 38(63.3%) of participants had favorable attitude towards electro convulsive therapy. Findings also showed that before psychoeducation mean attitude score was 26.12±6.184 and after psychoeducation mean attitude score was 53.37±11.17 with mean difference was 27.25. The study concluded that there is a significance difference between the pre test and post test levels of knowledge and attitude towards ECT among caregivers of mentally ill patients indicated that the given Psychoeducation was effective. And there is significance association between sex, area of residence, duration of stay with patient with selected demographic variables.*

Keywords: Electroconvulsive therapy, psychoeducation, caregivers of mentally ill, self-structured knowledge questionnaire, Likert scale

1. Introduction

"Always bear in mind that your own resolution to succeed is more important than any other one thing"
                                                    - Abraham Lincoln.

Electroconvulsive therapy (ECT) is one of the oldest treatments in psychiatry, which has survived the test of time. Today, ECT remains one of the most controversial treatments for psychological disorders and continues to be the subject of impassioned debate among various factions of society, within both the professional and lay communities. Despite controversies surrounding its use it still remains one of the most efficacious treatments for many severe mental disorders longer than any other physical treatment available for mental illness. It has achieved this longevity because when administered properly, for the right illness, it can help as much as or more than any other treatment (Popolos,2005). Electroconvulsive Therapy (ECT) is a psychiatric treatment method introduced in the late 1920s to cure a number of psychological illnesses and disorders such as depression, maniacs, acute psychotic conditions and catatonia.[15]

The stimulus is applied through electrodes that are placed either bilaterally in the front temporal region or unilaterally on the same side as the dominant hand (Marangell et al, 2003), controversy exists over optimal placement of the electrodes in terms of possible greater efficacy with bilateral placement versus the potential in some clients for less confusion and acute amnesia with unilateral placement. The duration of seizure should be at least 25 seconds (Sadock & Sadock, 2003). Movements are very minimal because of administration of a muscle relaxant before the treatment. The tonic phase of the seizure usually lasts 10-15 seconds and may be identified by a rigid plantar extension of the feet. The clonic phase follows and is usually characterized by rhythmic movements may be observed merely as a rhythmic twitching of the toes. Most clients require an average of 6 to 12 treatments, but some may require up tp 20 treatments (Sadock & Sadock, 2003) [14]. Treatments are usually administered every other day, three times per week. Treatments are performed on an inpatient basis for those who require close observation and care. Those at less risk may have the option of receiving therapy at an outpatient treatment facility. Worldwide, it has been estimated that about one million patients receive ECT annually.[1]

While searching scholarly literature it was found that, though there are various researchers on care givers knowledge and attitude towards ECT, but very view studies are conducted on educating the care givers regarding Electroconvulsive Therapy in Indian context for upgrading the knowledge and positive attitude towards ECT. Hence researcher strongly feels that, there is a need to conduct a study to assess the effectiveness of psychoeducation on knowledge and attitude towards ECT among care givers of mentally ill patients.

General Objective
To find out the effectiveness of Psychoeducation on knowledge and attitude towards Electroconvulsive Therapy among the care givers of mentally ill patients at GMCH, Guwahati.

Specific Objectives
1) To assess the level of knowledge and attitude towards Electroconvulsive therapy before and after psychoeducation among caregivers of mentally ill patients.
2) To evaluate the effectiveness of psychoeducation on knowledge and attitude towards Electroconvulsive therapy among caregivers of mentally ill patients.
3) To find out the association between post-test knowledge and attitude score towards Electroconvulsive therapy among caregivers of mentally ill patients with their selected demographic variables.

Hypothesis:
- **H₁:** There will be a significant difference in knowledge and attitude towards electroconvulsive therapy before and after psychoeducation at 0.05 level of significance.
- **H₂:** There will be a significant association between the post test knowledge and attitude score towards electroconvulsive therapy with their selected demographic variables at 0.05 level of significance

2. Review of Literature

Padmavati Nagaranjan, Gomathi Balachandar, Vikash Menon, Balachandar Saavanan, Indian Journal Of Psychological Medicine, 2020, conducted a study to assess Effect of a Video-Assisted Teaching Program About ECT on Knowledge and Attitude of Caregivers of Patients with Major Mental Illness. An experimental pre-test, post-test design was adopted. Forty caregivers of persons with schizophrenia ($n = 12$), depression ($n = 13$), BPAD with mania ($n = 8$), and BPAD with depression ($n = 7$) were selected using convenience sampling. The caregiver's knowledge and attitude toward ECT were assessed before and after the intervention with a single session video-assisted teaching on ECT. The data collection tool used to assess the caregiver's knowledge and attitude was based on a pre-validated questionnaire. The pre-test evaluation demonstrated poor knowledge among 12 (30%) and a moderate level of knowledge on the remaining 28 (70%) of the study subjects. The attitude scores revealed a neutral attitude among 47.5% and a conservative attitude among 10% of the subjects toward ECT. There was a significant improvement in both mean (±SD) knowledge (13.4 ± 4.7 vs

25.6 ± 2.9) and attitude (10.7 ± 3.5 vs 14.6 ± 3.9) scores following intervention with video-assisted teaching.[4]

Jack Tsai, Minda Huang, Robert A Rosenheck, Samuel Wilkinson, Psychiatric Services, 2020, the objective of the study was to A Randomized Controlled Trial of Video Psychoeducation for Electroconvulsive Therapy in the United States. This randomized controlled trial compared two forms of psychoeducation about ECT: video psychoeducation and an informational brochure. In 2019, a national sample of 556 U.S. adults who screened positive for depression were recruited and randomly assigned to receive one of these educational interventions online. Participant perceptions, knowledge, and willingness to receive ECT were assessed before and after psychoeducation. Both the video psychoeducation and brochure groups showed significantly more positive perceptions and knowledge about ECT following the intervention, with no significant differences between groups. The proportion of participants who reported being willing to receive ECT increased significantly after receipt of psychoeducation.[5]

Rafoul Baha, Michal Mashiach-Eizenberg, Ilanit Hasson-Ohayon& David Roe, International Journal Of Mental Health, 2020, conducted a study to assessed and compared knowledge of, attitudes toward, and willingness to undergo ECT among 227 participants from three groups: mental health staff members ($N = 104$), people with serious mental illness (SMI) ($N = 61$), and family members of people with SMI ($N = 62$). Participants completed questionnaires, which assessed knowledge about and attitude toward ECT as well as willingness to be treated with ECT. Results showed staff members as most knowledgeable, with most positive attitudes, and most willing to undergo ECT. Family members showed less knowledge, a less positive attitude, and a lower degree of willingness, whereas people with SMI demonstrated the least in all three variables.[3]

Sadeghian E, Rostami P, Shamsaei F, Tapak L, Journal of Neuropsychitric diseases and treatment (Dovepress), 6 December 2019,the aim of the study was to evaluate the effect of counseling on stigma in patients with psychiatric disorders receiving ECT. A total of 114 patients with psychiatric disorders undergoing ECT were randomly divided into two groups. Both the groups received routine care and treatment, but the intervention group (n=57) received four counseling sessions. At the beginning and end of the study (6 weeks, post-treatment), patients completed the Internalized Stigma of Mental Illness scale. The data were analyzed using independent and paired sample t-tests. There was no significant difference in the mean stigma scores of participants in the control and intervention groups before counseling ($P>0.08$). However, post-intervention, there was a significant difference in the mean stigma scores between both the groups ($P<0.001$).[7]

Patel Manisha M, Suresh .V, Bhoomika Patel, International Journal of Science and Research (IJSR), 2018, the objective of the study was to assess the effectiveness of video assisted teaching on knowledge regarding electroconvulsive therapy among patients

relatives. Pre experimental one group pre-test and post- test research design and non- probability purposive sampling technique was adopted. The tool used for data collected was questionnaires. Sample size was 30 patients relatives in selected hospitals in Vadodara, result reveals that video assisted teaching is effective and improve the knowledge regarding electroconvulsive therapy among patients relatives.This study the effectiveness of video assisted teaching on knowledge regarding electroconvulsive therapy among patient's relatives undergoing ECT. 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. [8]

3. Research Methodology

Research Approach: Quantitative research approach

Research Design: Pre-Experimental research design (One Group Pre-Test And Post-Test)

Setting of the Study: The study was conducted at Gauhati Medical College &Hospital, Guwahati

Population: The accessible population for the study comprises of the care givers of mentally ill patients admitted at psychiatric department, GMCH, Guwahati

Sampling Technique: Non Probability Convenience sampling Technique was used for this study.

Sample Size: The sample size of present study consist of 60.

Research Tool And Technique: Based on the objectives of the study on day one pre test was conducted by using self structured knowledge questionnaire to assess the knowledge and to assess the attitude 5 point Likert scale was used. The next day psychoeducation was implemented to the group and the effect of psychoeducation was assessed by post test on 7th day by using same knowledge questionnaire and attitude scale.

Variables:

Independent Variable: Psychoeducation,

Dependent Variable: knowledge and attitude towards Electroconvulsive therapy of care givers of mentally ill patients

4. Analysis and Interpretation

Section I: Description of the demographic variables of the samples

Table 1: Frequency and percentage distribution of demographic variables of caregivers of mentally ill patients n=60

Demographic variables:	Frequency	Percentage
Age in years:		
≤ 25 years	13	21.7%
26-35 years	20	33.3%
36-45 years	20	33.3%
46-55 years	7	11.7%
≥ 56 years	0	0%
Sex:		
Male	36	60%
Female	24	40%
Transgender	0	0%
Relationship with the patient:		
Spouse	23	38.3%
Parents	12	20%
Children	25	41.7%
Others	0	0%
Education:		
Primary school	7	11.7%
Middle school	10	16.7%
High school	11	18.3%
Intermediate/diploma	15	25%
Graduate	16	26.6%
Professional degree	1	1.7%
Occupation:		
Government job	6	10%
Private job	12	20%
Business	14	23.3%
Daily wage earner	6	10%
Unemployed	22	36.7%
Retired	0	0%
Area of residence:		
Rural area	35	58.3%
Urban area	25	41.7%
Duration of stay with patient:		
≤ 5 years	11	18.3%
6-10 years	18	30%
≥ 11 years	31	51.7%
Source of information:		
Health professional	17	28.3%
Mass media	4	6.7%
Friends	8	13.3%
Relatives	2	3.3%
None	29	48.4%

- Data depicted in the table (5) shows that majority 20(33.3%) of participants were in age group of 26-35 years, 20(33.3%) were in age group of 36-45 years, 13(21.7%) were in age group of less than or equal to 25 years and 7(11.7%) were in age group of 46-55 years.
- Maximum 36(60%) of participants were male and 24(40%) of participants were female.
- Majority 25(41.7%) of participants relationship with the patient were children, 23(38.3%) of participants relationship with the patient were spouse and 12(20%) of participants relationship with the patient were parents.
- Majority 16(26.6%) of participants were graduate, 15(25%) were educated up to intermediate or diploma, 11(18.3%) had up to high school, 10(16.7%) had up to middle school, 7(11.7%) had up to primary school and only 1(1.7%) had completed up to professional degree.
- Maximum 22(36.7%) of participants were unemployed, 14(23.3%) were doing business, 12(20%) were in private job, 6(10%) were in government job and 6(10%) were daily wage earner.
- Majority 35(58.3%) of participants were living in rural area and 25(41.7%) of participants were living in urban area.
- Majority 31(51.7%) of participants duration of stay with patients was above or equal to 11 years, 18(30%) of participants duration of stay with patients were for 6-10

years and 11(18.3%) of participants duration of stay with patients were for less than or equal to 5 years

- Maximum 29(48.4%) of participants had no information about electro convulsive therapy, 17(28.3%) got information from health professional, 8(13.3%) got information from friends, 4(6.7%) got information from mass media and 2(3.3%) got information from relatives.

Section II: Descriptive analysis of level of knowledge towards electroconvulsive therapy before and after psychoeducation among caregivers of mentally ill patients.

Table 2: Frequency and percentage distribution of level of knowledge towards electro convulsive therapy before and after psychoeducation among caregivers of mentally ill patients, n=60

Level of knowledge	Before		After	
	F	%	F	%
Adequate knowledge	0	0%	35	58.3%
Moderately Adequate knowledge	23	38.3%	25	41.7%
Inadequate knowledge	37	61.7%	0	0%

Data depicted in table 2 shows that before psychoeducation majority 37(61.7%) of participants had inadequate knowledge and 23(38.3%) of participants had moderately adequate knowledge whereas after psychoeducation majority 35(58.3%) of participants had adequate knowledge and 25(41.7%) had moderately adequate knowledge on electro convulsive therapy.

Section III: Descriptive analysis of level of attitude towards electroconvulsive therapy before and after psychoeducation among caregivers of mentally ill patients.

Table 3: Frequency and percentage distribution of level of attitude towards electro convulsive therapy before and after psychoeducation among caregivers of mentally ill patients, n=60

Level of attitude	Before		After	
	f	%	F	%
Favorable attitude	0	0%	38	63.3%
Less favorable attitude	27	45%	22	36.7%
Unfavorable attitude	33	55%	0	0%

Data depicted in table 3 shows that before psychoeducation majority 33(55%) of participants had unfavorable attitude and 27(45%) of participants had less favorable attitude while after psychoeducation majority 38(63.3%) of participants had favorable attitude and 22(36.7%) had less favorable attitude towards electroconvulsive therapy.

Section IV: Inferential analysis of to assess effectiveness of psychoeducation on knowledge towards electroconvulsive therapy among caregivers of mentally ill patients.

Table 4(a): Effectiveness of Psycho education on knowledge towards Electroconvulsive therapy among caregivers of mentally ill patients, n=60

Comparison of level of knowledge	Mean	SD	Mean Difference	t test value	df	p value
Before	10.08	3.326	10.08	16.31	59	0.001**
After	20.17	4.934				

*P<0.05 level of significance
NS-Non significant

Data depicted in table 4(a) showed that before psychoeducation mean knowledge score was 10.08±3.326 and after psychoeducation mean knowledge score was 20.17±4.934 with mean difference was 10.08. The comparison was tested using paired t test with obtained (t=16.31) was statistically significant at $p<0.05$ level. Findings revealed that psychoeducation was effective in improving the knowledge towards Electroconvulsive therapy among caregivers of mentally ill patients.

Hence, findings concluded that there was significant difference in knowledge towards electroconvulsive therapy before and after psychoeducation at 0.05 level of significance. H_1 hypothesis was accepted and H_{01} was rejected.

Section V: Inferential analysis of to assess effectiveness of psychoeducation on attitude towards electroconvulsive therapy among caregivers of mentally ill patients.

Table 4(b): Effectiveness of Psycho education on attitude towards Electroconvulsive therapy among caregivers of mentally ill patients, n=60

Comparison of level of attitude	Mean	SD	Mean Difference	t test value	df	p value
Before	26.12	6.184	27.25	23.56	59	0.001**
After	53.37	11.17				

*P<0.05 level of significance
NS-Non significant

Data depicted in table 4(b) showed that before psychoeducation mean attitude score was 26.12±6.184 and after psychoeducation mean attitude score was 53.37±11.17 with mean difference was 27.25. The comparison was tested using paired t test with obtained (t=23.56) was statistically significant at $p<0.05$ level. Findings revealed that psychoeducation was effective in improving the attitude towards Electroconvulsive therapy among caregivers of mentally ill patients.

Hence, findings concluded that there was significant difference in attitude towards electroconvulsive therapy before and after psychoeducation at 0.05 level of significance. H_1 hypothesis was accepted and H_{01} was rejected.

Section VI: Association between the post test knowledge score towards electroconvulsive therapy with their selected demographic variables.

Table 5 (a): Association between post-test knowledge score towards electroconvulsive therapy among caregivers of mentally ill patients with their selected demographic variables, n=60

S. No	Demographic variables	Post-test level of knowledge		χ^2 value	df	p value
		Moderately adequate	Adequate knowledge			
1	Age (in years)					
	a. ≤ 25 years	6	7	0.716	3	0.869[NS]
	b. 26-35 years	9	11			
	c. 36-45 years	8	12			
	d. 46-55 years	2	5			
	e. ≥ 56 years	--	--			
2	Sex					
	a. Male	19	17	4.571	1	**0.033**[*]
	b. Female	6	18			
	c. Transgender	--	--			
3	Relationship with the patient					
	a. Spouse	10	13	0.43	2	0.807[NS]
	b. Parents	4	8			
	c. Children	11	14			
	d. Others	--	--			
4	Education					
	a. Primary school	1	6	6.092	5	0.297[NS]
	b. Middle school	3	7			
	c. High school	4	7			
	d. Intermediate/diploma	9	6			
	e. Graduate	8	8			
	f. Professional degree	0	1			
5	Occupation					
	a. Government job	4	2	3.691	4	0.449[NS]
	b. Private job	6	6			
	c. Business	6	8			
	d. Daily wage earner	1	5			
	e. Unemployed	8	14			
	f. Retired	--	--			
6	Area of residence					
	a. Rural area	19	16	5.503	1	**0.019**[*]
	b. Urban area	6	19			
7	Duration of stay with patient					
	a. ≤ 5 years	6	5	6.641	2	**0.036**[*]
	b. 6-10 years	3	15			
	c. ≥ 11 years	16	15			
8	Source of information					
	a. Health professional	8	9	1.751	4	0.781[NS]
	b. Mass media	1	3			
	c. Friends	2	6			
	d. Relatives	1	1			
	e. None	13	16			

*P<0.05 level of significance
NS-Non significant

Data depicted in table 5(a) shows that there is association between post-test knowledge score towards electroconvulsive therapy among caregivers of mentally ill patients with their selected demographic variables. The chi squares values revealed that sex, area of residence and duration of stay with patient were statistically found significant association at p<0.05 level. The other demographic variables such as age, relationship with the patients, education, occupation and source of information were statistically non significant at p<0.01 level with post-test knowledge score towards electroconvulsive therapy among caregivers of mentally ill patients.

Thus the research hypothesis **H₂:** "There will be a significant association between the post test knowledge and attitude score towards electroconvulsive therapy with their selected demographic variables at 0.05 level of significance" is accepted with respect to **Sex, Area of residence and Duration of stay with patient** and H₀₂ is rejected.

Section VII: Association between the post test attitude score towards electroconvulsive therapy with their selected demographic variables.

Table 5 (b): Association between post-test attitude score towards electroconvulsive therapy among caregivers of mentally ill patients with their selected demographic variables, n=60

S. No	Demographic variables	Post-test level of attitude		χ^2 value	df	p value
		Less favorable	Favorable			
1	Age in years					
	a. ≤ 25 years	6	7			
	b. 26-35 years	8	12			
	c. 36-45 years	6	14	1.18	3	0.758[NS]
	d. 46-55 years	2	5			
	e. ≥ 56 years	--	--			
2	Sex					
	a. Male	18	18			
	b. Female	4	20	6.89	1	**0.009**[*]
	c. Transgender	--	--			
3	Relationship with the patient					
	a. Spouse	7	16			
	b. Parents	4	8	1.021	2	0.600[NS]
	c. Children	11	14			
	d. Others	--	--			
4	Education					
	a. Primary school	1	6			
	b. Middle school	3	7			
	c. High school	4	7	3.272	5	0.658[NS]
	d. Intermediate/diploma	7	8			
	e. Graduate	7	9			
	f. Professional degree	0	1			
5	Occupation					
	a. Government job	4	2			
	b. Private job	5	7			
	c. Business	5	9	3.716	4	0.446[NS]
	d. Daily wage earner	1	5			
	e. Unemployed	7	15			
	f. Retired	--	--			
6	Area of residence					
	a. Rural area	17	18	5.126	1	**0.024**[*]
	b. Urban area	5	20			
7	Duration of stay with patient					
	a. ≤ 5 years	6	5			
	b. 6-10 years	2	16	7.54	2	**0.023**[*]
	c. ≥ 11 years	14	17			
8	Source of information					
	a. Health professional	7	10			
	b. Mass media	1	3			
	c. Friends	2	6	1.025	4	0.906[NS]
	d. Relatives	1	1			
	e. None	11	18			

*P<0.05 level of significance
NS-Non significant

Data depicted in the table 5(b) shows that there is association between post-test attitude score towards electroconvulsive therapy among caregivers of mentally ill patients with their selected demographic variables. The chi squares values revealed that sex, area of residence and duration of stay with patient were statistically found significant association at p<0.05 level. The other demographic variables such as age, relationship with the patients, education, occupation and source of information were statistically non significant at p<0.01 level with post-test attitude score towards electroconvulsive therapy among caregivers of mentally ill patients.

5. Discussion

Discussion as per the objectives of the research study

Objective 1: To assess the level of knowledge and attitude towards Electroconvulsive therapy before and after psychoeducation among caregivers of mentally ill patients.

The result of the study revealed that before psychoeducation majority 37(61.7%) of participants had inadequate knowledge and 23(38.3%) of participants had moderately adequate knowledge whereas after psychoeducation majority 35(58.3%) of participants had adequate knowledge

and 25(41.7%) had moderately adequate knowledge on electro convulsive therapy.

The present study findings also support the study conducted by **Patel Manisha, Suresh. V, Bhoomika Patel (2018)** on "a study to assess the effectiveness of video assisted teaching on knowledge regarding Electroconvulsive therapy among patients relatives undergoing ECT in Selected Hospitals in Vadodara": a pre experimental one group pre test and post test research design with purposive sampling technique among 30 patients relatives, result revealed that 66.7%were had moderately adequate knowledge and 33.3% had inadequate knowledge and non of there adequate knowledge. Where as in post-test majority 86.67% had adequate knowledge, 13.33% belongs to moderately adequate knowledge and non of there had inadequate knowledge.[8]

The result of the study revealed that before psychoeducation majority 33(55%) of participants had unfavorable attitude and 27(45%) of participants had less favorable attitude while after psychoeducation majority 38(63.3%) of participants had favorable attitude and 22(36.7%) had less favorable attitude towards electro convulsive therapy.

The present study findings also support the study conducted by **Padmavati Nagaranjan, Gomathi Balachandar, Vikash Menon, Balachandar Saavanan, Indian Journal Of Psychological Medicine, 2020,** to assess Effect of a Video-Assisted Teaching Program About ECT on Knowledge and Attitude of Caregivers of Patients with Major Mental Illness. An experimental pre-test, post-test design was adopted. Forty caregivers of persons with schizophrenia ($n = 12$), depression ($n = 13$), BPAD with mania ($n = 8$), and BPAD with depression ($n = 7$) were selected using convenience sampling. The caregiver's knowledge and attitude toward ECT were assessed before and after the intervention with a single session video-assisted teaching on ECT. The pre-test evaluation demonstrated the attitude scores revealed a neutral attitude among 47.5% and a conservative attitude among 10% of the subjects toward ECT.[4]

Objective 2: To evaluate the effectiveness of psychoeducation on knowledge and attitude towards Electroconvulsive therapy among caregivers of mentally ill patients.

The result of the study showed that before psychoeducation mean knowledge score was 10.08±3.326 and after psychoeducation mean knowledge score was 20.17±4.934 with mean difference was 10.08. The comparison was tested using paired t test with obtained (t=16.31) was statistically significant at p<0.05 level. Findings revealed that psychoeducation was effective in improving the knowledge towards Electroconvulsive therapy among caregivers of mentally ill patients.

The present study findings also support the study conducted by **Patel Manisha, Suresh. V, Bhoomika Patel (International Journal of Science and Research,2018)**on "a study to assess the effectiveness of video assisted teaching on knowledge regarding Electroconvulsive therapy among patients relatives undergoing ECT in Selected Hospitals in Vadodara": a pre experimental one group pre test and post test research design with purposive sampling technique among 30 patients relatives, result revealed that before video assisted teaching mean knowledge score was 11.43 + 1.88 and after intervention (video assisted teaching) mean knowledge score was 20.00 + .0000 with mean difference was 8.57. The comparison by paired "t" test (t=24.53) was statistically significant at p<0.05 level of significance.[8]

The result of the study showed that before psychoeducation mean attitude score was 26.12±6.184 and after psychoeducation mean attitude score was 53.37±11.17 with mean difference was 27.25. The comparison was tested using paired t test with obtained (t=23.56) was statistically significant at p<0.05 level.[8]

The present study findings also support the study conducted by **Padmavati Nagaranjan, Gomathi Balachandar, Vikash Menon, Balachandar Saavanan, Indian Journal Of Psychological Medicine, 2020,** to assess Effect of a Video Assisted Teaching Program About ECT on Knowledge and Attitude of Caregivers of Patients with Major Mental Illness. An experimental pre-test, post-test design was adopted. Forty caregivers of persons with schizophrenia ($n = 12$), depression ($n = 13$), BPAD with mania ($n = 8$), and BPAD with depression ($n = 7$) were selected using convenience sampling. The caregiver's knowledge and attitude toward ECT were assessed before and after the intervention with a single session video-assisted teaching on ECT. The pre-test evaluation demonstrated poor knowledge among 12 (30%) and a moderate level of knowledge on the remaining 28 (70%) of the study subjects. The attitude scores revealed a neutral attitude among 47.5% and a conservative attitude among 10% of the subjects toward ECT. There was a significant improvement in both mean (±SD) knowledge (13.4 ± 4.7 vs 25.6 ± 2.9) and attitude (10.7 ± 3.5 vs 14.6 ± 3.9) scores following intervention with video-assisted teaching.[4]

Objective 3: To find out the association between post-test knowledge and attitude score towards Electroconvulsive therapy among caregivers of mentally ill patients with their selected demographic variables.

In the present study, while determining the association between post-test knowledge and attitude score towards Electroconvulsive therapy among caregivers of mentally ill patients with their selected demographic variables result of chi square shows that there is significant association between knowledge with sex of the caregivers ($\chi2=4.571$, df=1, p-value=0.033), area of residence ($\chi2=5.503$, df=1, p-value=0.019) and duration of stay with patient ($\chi2=6.641$, df=2, .p-value=0.036) and also result of chi square shows that there is significant association between attitude with sex of the caregivers ($\chi2=6.890$, df=1, p-value=0.009), area of residence ($\chi2=5.126$, df=1, p-value=0.024) and duration of stay with patient ($\chi2=7.540$, df=2, .p-value=0.023).

The present study findings also support the study conducted by **Manoj Kumar L, Eugin S.B, Asian Journal of Nursing Education and Research, 2017** conducted a

study to assess the knowledge regarding electro convulsive therapy (ECT), attitude towards ECT and association of knowledge and attitude with selected socio demographic variables. Sample consisted of 120 care givers of mentally ill client's recruited using purposive sampling technique, results shows that there is significant association between education and level of knowledge (p=0.043) and also there is significant association between education and attitude (p=0.0213).[9]

6. Conclusion

The main objective of the study was to determine the effectiveness of Psychoeducation on knowledge and attitude towards ECT among caregivers of mentally ill patients at GMCH, Guwahati, Assam. The statistical analysis revealed that there is a significance difference between the pre test and post test levels of knowledge and attitude towards ECT among caregivers of mentally ill patients indicated that the given Psychoeducation was effective.

7. Recommendation

- The comparative study can also be done to assess the effectiveness of Psychoeducation among care givers of mentally ill.
- The study can be done on large sample size to generalize the effectiveness Psycho education.
- An experiment study can be done to assess the effectiveness of Psychoeducation regarding ECT among the general public.

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