A Study to Assess the Knowledge and Attitude Regarding Electroconvulsive Therapy among Caregivers of Mentally III Patients in Selected Government Medical College Attached Hospital and Hospital for Mental Health of Madhya Pradesh State with a View to Develop Pamphlet on it

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Abstract

Background: Mental disorders are broadly classified as neurosis and psychosis. Neurosis includes anxiety neurosis, depressive neurosis, hysterical neurosis, phobic neurosis, etc., psychosis mainly includes schizophrenia, depression, mania, and some special disorders such as childhood disorder, personality disorder, substance abuse, and mental retardation.

Methods: This study is aimed to assess the knowledge and attitude regarding ECT among caregivers of mentally ill patients in selected government medical college attached hospital and hospital for mental health of Madhya Pradesh state with a view to develop pamphlet on it, the survey type of approach is considered the most appropriate.

Results: In relation to the finding of the study, it was revealed that the majority of respondents 25% had poor knowledge, 67% had an average knowledge and few 8% had good knowledge regarding ECT among caregivers of mentally ill patients. Related to finding of attitude this study revealed that 62 (62%) samples had negative attitude and 38 (38%) samples had positive attitude.

Conclusion: Nurse can increase awareness regarding ECT among the caregivers of the mentally ill. Nurse should enhance IEC activities to remove the misconceptions regarding Stigma and Discrimination in regard to mental illness. This will help nursing profession to make the caregivers more aware of promotion and protection of health during mental illness and receiving ECT.

Keywords: Assess, attitude, care givers, electro-convulsive therapy, hospital for mental health, knowledge, mentally ill patients, pamphlets, selected Government medical college attached hospital.

INTRODUCTION

Electroconvulsive therapy (ECT) is a medical procedure that is used to treat a range of medical illnesses, such as severe depression, catatonia, and some forms of mania and schizophrenia.^[1] Electroconvulsive therapy (ECT) proved

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to be effective for treating severe depression and catatonic schizophrenia, with only minor and reversible side effects. For establishing a favorable relation between good clinical outcome and remarkable few side effects, the following factors seem to be of importance, in accordance with the literature: (1) application of biphasic short-impulse stimuli in anesthetized and muscle relaxed patients; (2) measurement of static impedance to avoid high skin impedance and short circuits. (3) At the beginning of each ECT series unilateral electrode placement over the non-dominant hemisphere; (4) ECT 3 times weekly on non-consecutive (ECT) is a potent therapy in severe treatment-refractory depression. Although commonly applied in

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psychiatric clinical routine for decades, the exact neurobiological mechanism regarding its efficacy remains unclear.^[2]

Mental illness is universal, affecting people in all countries, individual of all ages, women and men, rich and poor, from urban to rural environments affecting more than 25% of people, Mental illness is caused by predisposing factors such as genetic, biological, and socio-cultural factors.^[3]

ECT has been viewed as harmful by the general public, psychiatric patients, and mental health professionals, despite such debate, ECT is used in the United States and endorsed by the American Psychiatric Association. Approximately 100,000 patients annually receive ECT in the United States. Professional associations in Austria, Canada, Australia, Denmark, Netherlands, Germany, and India have offered professional guidelines for its use.^[4]

The many researches were conducted on family members knowledge and attitude about the ECT. ECT has been reported to result in a prompt improvement in symptoms of depression in the majority of patients treated. The consortium for research in ECT reported a 75% remission rate among 217 patients who completed a short course of ECT during an acute episode of depression, with 65% patients having remission by the 4th week of therapy. Systematic review of six, trials involving 256 patients by the UK, ECT Review Group, reported in 2003, showed that the effect size for ECT was 0.91 (significantly more effective than sham ECT) and a review of 18 trials involving 1144 patients showed that the effect size for ECT was 0.80 (more effective than pharmacotherapy). Fish's (2004).^[5]

We know much about scientific nature of ECT. But caregivers remain for more time with patients. Hence, it becomes necessary to search that, whether caregivers have sufficient knowledge about ECT, which they are applying on their loved one. At the same time, one will be interested to search their attitude toward ECT.^[6]

Objectives of the Study

- To assess the knowledge regarding ECT among caregivers of mentally ill patients in selected Government medical college attached hospitals and hospitals for mental health
- To assess the attitude regarding ECT among caregivers of mentally ill patients in selected government medical college attached hospitals and hospitals for mental health
- To find out correlation between knowledge and attitude regarding ECT among caregivers of mentally ill patients in selected government medical college attached hospitals and hospitals for mental health
- 4. To find out association between knowledge with selected demographic variables regarding ECT among caregivers of mentally ill patients in selected government medical college attached hospitals and hospitals for mental health
- To find out association between attitude with selected demographic variables regarding ECT among caregivers of mentally ill patients in selected government medical

college attached hospitals and hospitals for mental health
To prepare pamphlet regarding ECT among caregivers of mentally ill patients in selected government medical college attached hospitals and hospitals for mental health.

MATERIALS AND METHODS

Study Design and Setting

Research design selected for the present study is crosssectional with typical descriptive design. Investigator was made decisions about full nature of the intervention as part of the research design.

Sample Size and Sampling Method

The investigator selected 100 caregivers of mentally ill patients in selected government medical college attached hospital and hospital for mental health of M.P.

For selection of sample, investigator has used convenient technique, in that the purest and the most straightforward non-probability sampling technique was used, to selected psychiatric set up of Madhya Pradesh state in which the required number of sampling units were selected from the population in such a manner that each population element, those who fulfilled the criteria laid down for the selection of the sample and who was available during the period of data collection.

Data Collection Tool and Technique

The development of tool is a step-by-step procedure in order to make the tool. Investigator came across some studies that used structured questionnaire to assess the Knowledge and Attitude regarding ECT among Caregivers of Mentally Ill Patients. A review of research and non-research literature, expert's opinion, and investigator's experience is the basis for the construction of the tools for data collection for the present study. The investigator was selected the following tools for the data collection.

Investigator prepared a structured questionnaire to assess knowledge and likert's attitude scale to assess attitude regarding ECT among Caregivers of Mentally Ill Patients. A questionnaire is simply a tool for collecting and recording information about a particular issue of interest. It is mainly made up of a list of questions, but should also include clear instructions and space for answers or administrative details Tool developed according to the objectives of the study.

Data Management and Analysis

As per prepared schedule, the data were collected by conducting interview session by researcher.

Descriptive and inferential statistics were used to describe and interpret the data. To complete the data a master data sheet was prepared by the investigator. Investigator had organized collected data systemically and interpreted in the form of tables and charts for analysis. For interpretation, the investigator had used descriptive and inferential statistical methods.

Descriptive statistics have been used such as frequency and percentage. The correlation between knowledge and attitude regarding ECT among caregivers of mentally ill patients was shown by "karlpearson" method. The association between the variables was shown using Chi-square formula the association between the variables was shown using Chi-square formula. Association refers to a process for establishing whether or not relationship exist between two variables.

Ethical and Cultural Considerations

Before starting data collection formal permission was obtained from concerned authorities such as Medical, Nursing Superintendent and director of Psychiatric set up of Madhya Pradesh State. Investigator collected data from selected psychiatric setting of M.P. Formal addressing and permission letter and information was given to each respondent for their participation in the study. The respondents were explained about the purpose of the study. As per prepared schedule, the data were collected by conducting interview session by researcher.

RESULTS

Following were the major findings of the research study:

- 1. Findings related to demographic data of the samples
- 2. Findings related to knowledge of samples
- 3. Findings related to attitude of samples
- 4. Findings related to correlation between knowledge and attitude of samples
- 5. Findings of association of knowledge with selected demographic data of the samples
- 6. Findings of association of Attitude with selected demographic data of the samples.

Findings Related to Demographic Data of the Samples

With regards to age (in years) out of 100 samples under study, Majority of 47 (47%) are between 31 and 40 years. With regard to gender Majority of 61 (61%) are Males. With regards to religion majority 68 (68%) are Hindu. With regards to relationship with patient 44 (44%) are either husband or wife. According to Education majority of 42 (42%) are primary educated. With regards to occupation 51 (51%) are doing job [Table 1].

Table 1 shows the demographic data of samples those who were participated in the study.

Findings Related to Knowledge of Samples

Out of 100 samples, 25 (25%) samples had poor knowledge scores, whereas 67 (67%) samples had an average knowledge scores and only 8 (8%) samples had good knowledge scores regarding ECT.

Hence, investigator concluded that the majority of samples had an average knowledge regarding ECT [Table 2].

The data presented in above Table 2 shows the knowledge score obtained by samples. The knowledge area was divided

Table 1: Frequency and percentage wise distribution of demographic data of samples. [n=100]

Demographic data	Frequency	Percentage (%)
Age		
18-30 years	21	21
31-40 years	47	47
41-50 years	26	26
51 year and above	6	6
Gender		
Male	61	61
Female	39	39
Religion		
Hindu	68	68
Muslim	21	21
Christian	10	10
Other	1	1
Relationship with patient		
Mother/Father	10	10
Husband/Wife	44	44
Brother/Sister	36	36
Others	10	10
Education		
No formal education	2	2
Primary	42	42
Secondary	32	32
Higher secondary	11	11
Graduation and above	13	13
Occupation		
Student	4	4
Business	15	15
Job	51	51
Household work	26	26
Others	4	4

into seven sub areas. The data presented in above table shows the area wise distribution of knowledge score of the samples.

Findings Related to Attitude of Samples

Out of 100 samples, 38 (38%) samples had positive attitude whereas 62 (62%) had a negative attitude regarding ECT.

Hence, investigator concluded that more numbers of the caregivers had negative attitude regarding ECT [Table 3].

The data presented in Table 3 shows knowledge level of samples on Electro -Convulsive Therapy (ECT). Out of 100 samples 25(25%) samples had poor knowledge scores, whereas 67 (67%) samples had poor knowledge scores, whereas 67 (67%) samples had an average knowledge scores and only 8(8%) samples had good knowledge scores regarding ECT.

Findings Related to Correlation between Knowledge and Attitude of Samples

Correlation between knowledge and attitude by Karl Pearson formula which is 0.77 so that it is moderately positive correlation between knowledge and attitude on ECT among caregivers [Table 4].

Table 4 shows that samples scored 65–100 were having positive attitude and samples that scored 20-64 were having negative attitude regarding ECT. So out of 100 samples 38(38%) samples had positive attitude whereas 62(62%) had negative attitude regarding ECT.

Table 2: Area wise mean score and percentage of knowledge of the samples [n=100]

S. No.	Area	Maximum score	Mean score	Obtained score	Mean percentage %
1.	General Information of ECT	4	0.04	257	57.5
2.	Mode of action ECT	2	0.02	110	60
3.	Frequency of ECT	2	0.02	56	20
4.	Indication of ECT	2	0.02	39	15
5.	Procedure of ECT	2	0.02	134	65
6.	Side effects of ECT	3	0.03	62	6.66
7.	Responsibility of caregivers for ECT	5	0.05	185	32
Total		20		843	

ECT: Electroconvulsive therapy

Table 3: Frequency and percentage wise distribution of samples based on knowledge score. [n=100]

Level of knowledge	Classification of score	Frequency (f)	Percentage (%)
Poor	0–6	25	25
Average	7–13	67	67
Good	14-20	08	08
Total		100	100

Table 4: Frequency and percentage wise distribution of samples based on attitude score [n=100]

Level of attitude	Classification of score	Frequency (f)	Percentage (%)
Positive	65–100	38	38
Negative	20-64	62	62
Total		100	100

Findings of Association of Knowledge with Selected Demographic Data of the Samples

In the present study, the findings of the Chi-square value are find out the association between demographic variables such as age with knowledge, Gender with knowledge, religion with knowledge, relationship with patient with knowledge, education with knowledge, and occupation with knowledge. From all of them, there is a significant association between Education and Knowledge. Whereas no other was found statistically significant at 0.05 level of significance [Table 5].

Table 5 shows that correlation coefficient (r) between knowledge and attitude by Karl Pearson formula which is 0.77 which was in between 0-1. So it was statistically significant at the 0.05 level of significance.

This shows that Chi-square test was used to carry out statistically significant relationship or not between age of samples and knowledge level regarding ECT [Table 6].

Findings of Association of Attitude with Selected Demographic Data of the Samples

In the present study, the findings of the Chi-square value are find out the association between demographic variables such as age with attitude, gender with attitude, religion with attitude, relationship with patient and attitude, education with attitude, and occupation with attitude. From all of them gender, education, and occupation found statistically significant at 0.05 level of significance, whereas there is no any other association.

Table 5: Correlation of knowledge with attitude of samples on ECT [n=100]

Karl Pearson correlation coefficient (r)				
Knowledge mean score	Attitude mean score	Formula "r" (Karl Pearson Correlation coefficient)	Inferences	
8.43	61.98	0.77	Moderately positive correlation at 0.05 level of significance	

ECT: Electroconvulsive therapy

Table 6: Association of age group with knowledge of samples [n=100]

Age	Knowledge score		Total	Calculated	Tabulated	
(years)	Poor	Average	Good		value of χ^2	value of χ^2
18-30	2	16	3	21	6.09	12.59
31-40	15	28	4	47		
41 - 50	7	18	1	26		
51 and above	1	5	0	6		
Total	25	67	8	100		

^{*}Significant at 0.05 level, df (6), $\chi^2=6.09$

DISCUSSION

The present study addressed to assess the knowledge and attitude regarding to assess the knowledge and attitude regarding ECT among caregivers of mentally ill patients in selected government medical college attached hospital and hospital for mental health of Madhya Pradesh state. In this survey, was conducted on 100 caregivers of mentally ill patients.

In relation to the finding of the study, it was revealed that majority of respondents 25% had poor knowledge, 67% had an average knowledge and few 8% had good knowledge regarding ECT among caregivers of mentally ill patients. Related to finding of attitude this study revealed that 62 (62%) samples had negative attitude and 38 (38%) samples had positive attitude.^[7]

There was moderately positive correlation between knowledge and attitude of samples at 0.05 level of significance. In association, there was significant association between knowledge with selected demographic variables and there was significant association between attitude with selected demographic variables.^[8]

There was moderately positive correlation between knowledge and attitude regarding Knowledge and attitude regarding ECT. Which signifies that with increase in knowledge there is a development of positive attitude regarding ECT among caregivers of mentally ill patients.^[9]

There is a significant association between education with knowledge. Whereas significant association found between gender, education, and occupation with attitude.

Hence, the investigator decided to develop a pamphlet on ECT among caregivers of mentally ill patients which would help them in increasing knowledge and molding a positive attitude toward the ECT among caregivers of mentally ill patients.^[10]

CONCLUSION OF THE STUDY

From the above findings, it was concluded that caregivers have 25% poor knowledge, 67% average knowledge and 8% have good knowledge regarding ECT. The attitude regarding ECT of caregivers of mentally ill patients showed 62% negative attitude and 38% positive attitude.

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