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**“ A STUDY TO ASSESS THE EFFECTIVENESS OF PSYCHOEDUCATION ON
KNOWLEDGE REGARDING ECT AMONG THE CAREGIVERS OF MENTALLY
ILL AT SELECTED TERTIARY TEACHING HOSPITAL, KUPPAM, CHITTOOR
DISTRICT, ANDHRAPRADESH.”**

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ABSTRACT:

Back ground of the study: This study aimed to investigate the level of understanding among patients and caregivers regarding Electroconvulsive therapy (ECT), a safe and effective treatment for major psychiatric disorders. The objective was to assess how psychoeducation improved knowledge about ECT among caregivers of mentally ill individuals at tertiary teaching hospitals in Andhra Pradesh. **Methods:** The study used a pre-experimental design with

*a one-group pre-test-post-test approach. A total of 90 caregivers were selected through non-probability convenient sampling from the psychiatric ward and new psychiatric ward at PES Hospital. Data collection involved a self-administered knowledge questionnaire. Following this, caregivers received psychoeducation on ECT for 15-20 minutes. A post-test using the same knowledge questionnaire was conducted after 7 days. Descriptive statistics, paired t-tests, and chi-square analysis were used to analyze the collected data. **Result of the study:** Before the psychoeducation session, none of the caregivers exhibited adequate knowledge about ECT. Specifically, 10 (11.1%) had moderately adequate knowledge, while 80 (88.9%) had inadequate knowledge. Following the psychoeducation session, the knowledge levels among caregivers after 7 days showed significant improvement: 73 (81.1%) achieved adequate knowledge, 13 (14.4%) had moderately adequate knowledge, and 4 (4.4%) still had inadequate knowledge. The difference between pre-test and post-test scores was notable, with an overall pre-test mean of 7.056 ± 2.593 and a post-test mean of 27.79 ± 5.820 . This indicates that the psychoeducation on ECT for caregivers of mentally ill patients was highly effective, as evidenced by a substantial increase in knowledge scores ($t = 28.434$). **Conclusion:** The study concluded that there was a significant difference between the pre-test and post-test levels of knowledge regarding ECT among caregivers of mentally ill patients, demonstrating the effectiveness of the provided psychoeducation. Additionally, the study found no significant association between the selected demographic variables and the knowledge levels.*

Key words: Effectiveness, Psycho education, Knowledge, ECT, mentally ill, Caregivers

Introduction:

Electroconvulsive therapy (ECT), also known as electroshock, is a psychiatric treatment where seizures are induced by passing electricity through the brain of an anesthetized patient¹. ECT was first introduced in the 1930s for treating schizophrenia and later became widely used for various psychiatric disorders, including depression [1,2].

The idea of inducing convulsions, initially through chemicals, dates back to the 16th century. In 1937, Italian neurologist Ugo Cerletti explored the use of Metrazol-induced convulsions for treating schizophrenia but deemed them too risky and uncontrollable³. Instead, he experimented with electric shocks to reliably induce seizures, leveraging his expertise in epilepsy research [3,4].

ECT remains one of psychiatry's oldest treatments, enduring despite ongoing controversy. It is highly debated among professionals and the public alike. Despite controversies, ECT has

proven to be highly effective for severe mental disorders, often surpassing other available treatments in efficacy [5].

While there is substantial research on caregivers' knowledge and attitudes towards ECT, few studies have focused on educating caregivers about ECT in the Indian context to enhance knowledge and foster positive attitudes. Therefore, there is a compelling need for a study to evaluate the effectiveness of psychoeducation on enhancing knowledge about ECT among caregivers of mentally ill patients [6].

Objectives of the study

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

Hypotheses:

RH1: The mean post-test knowledge score of care givers receiving psycho education regarding ECT will be significantly higher than the mean pre-test knowledge score.

RH2: There will be significant association between pretest levels of psycho education knowledge regarding ECT with their selected demographic variables among care givers mentally ill.

Material and Methods

Research Approach: An evaluative approach was utilized to assess the effectiveness of psychoeducation on knowledge about ECT among caregivers of mentally ill patients at selected tertiary teaching hospitals in Kuppam, Chittoor District, Andhra Pradesh.

Research Design: The study utilized a pre-experimental design with a one-group pre-test and post-test design.

Research Setting: Tertiary level hospitals in Kuppam.

Population:

Target population: The target population of the study comprised of care givers of mentally who are admitted and visiting psychiatry OPD at tertiary teaching hospitals Kuppam

Accessible population: Accessible population of the study comprised of care givers of mentally ill at tertiaryteaching hospitals Kuppam.

Sample:

The study sample comprises of care givers of mentally ill who are admitted in psychiatric unit at tertiary teaching hospitals, Kuppam and those who fulfilled the inclusion criteria.

Sample Size: The sample size for the present study was calculated by using power analysis and the researcherhas taken 90 care givers as sample size at tertiary teaching hospital Kuppam.

Sampling Technique: The samples were selected using a non-probability convenience sampling method.

Sample Selection Criteria:

Inclusion Criteria:

1. Caregivers of mentally ill patients who were available during the data collection period.
2. Both male and female caregivers who were willing to participate.

Exclusion Criteria:

1. Care givers of mentally ill patients who are contra indicated to ECT.
2. Both male and female care givers who are not willing to participate

Research Variables: The variables under study are independent variable, dependent variable and demographical variables

Independent variable: Psycho education On Knowledge Regarding ECT.

Dependent variable: Knowledge of caregivers of mentally ill regarding Pyscho education On Knowledge Regarding ECT

Demographic variables: Demographic profile consist of sample number, gender, age of the care givers, marital status, relationship to the patient, education, occupation,area of residence, duration of stay with the patient , previous source of information,

Content validity: The validity of tools obtained from the experts in the field of psychiatric nursing. The suggestions and advice given by experts were considered and corrected.

Reliability: Reliability is the degree of consistency that the instrument demonstrates. Tools were administered to 11 subjects in a similar setting at tertiary teaching hospital Kuppam. The tool was found to be clear and understandable. Samples took around 20-30 minutes to answer the tool. Test retest reliability was established by using cronbachs alpha formula. The reliability ofthe tool was $r= 0.79$

Ethical Clearance: Ethical clearances were obtained from the institutional human ethics committee, at tertiary care teaching hospital, Kuppam.

Pilot Study:

Pilot study was conducted from 11-10-2023 to 16-10-2023 in PES hospital in psychiatric ward third floor at Kuppam, prior to pilot study a formal permission was obtained from medical superintendent at PES hospital Kuppam. Researcher conducted pilot study among 10 care givers who fulfills the inclusion criteria has selected and assigned as study samples. The pilot study reveals the clarity, feasibility and practicability in all aspects to conduct main study.

Data Collection Procedure:

The study was conducted from 29-10-2023 to 18-11-2023 at tertiary teaching hospitals, Kuppam. A formal permission was obtained from the medical director of at tertiary teaching hospitals, Kuppam. and 90 care givers of mentally ill was selected by using purposive sampling method, who fulfills the inclusion criteria. And the researcher will explain the purpose of the study to the care givers, pre-test was conducted to care givers by using structured questionnaire to determine the level of knowledge regarding ECT. After psycho education regarding ECT post-test was conducted using the same tool.

Results

The data organized and presented under the following:

Section–I: Frequency and percentage distribution of the socio- demographic variables among care givers (Table 1).

Section–II: Frequency and percentage distribution of pre- test and post-test knowledge scores on knowledge regarding psychoeducation on ECT among care givers (Table 2).

Section–III: Comparison of pre and post- test mean SD “t” and p-values knowledge score on knowledge regarding psychoeducation on ECT among care givers (Table 3).

Section–IV: Association between pre-test knowledge scores on knowledge regarding psychoeducation on ECT among care givers with their demographic variables.

Table 1: FREQUENCY AND PERCENTAGE DISTRIBUTION OF CARE GIVERS ACCORDING TO DEMOGRAPHIC VARIABLES,

N= (90)

DEMOGRAPHICAL VARIABLES AMONG CARE GIVERS	FREQUENCY (f)	PERCENTAGE (%)
1. Gender		
a. Male	42	46.70%
b. Female	48	53.30%
2. Age		
a.25-30 years	44	48.90%
b.31-35years	34	37.80%
c.36-40years	12	13.30%
3. Marital status		
a. Married	75	83.30%
b. Unmarried	15	16.60%
4. Relationship to the patient		
a. Husband	20	22.20%
b. Wife	10	11.10%
c. Father	26	28.90%
d. Mother	24	26.70%
e. Spouse	10	11.10%
5. Educational status		
a. degree	35	38.90%
b. high school	16	17.80%
c. illiterate	11	12.20%
d primary	14	15.60%
e. secondary	14	15.60%
6. Occupation		
a. employed	32	35.60%
b. house wife	24	26.70%
c. retired	4	4.40%
d. unemployed	30	33.30%
7. Area of residence		
a. rural	52	57.80%
b. semi urban	7	7.80%
c. urban	31	34.40%
8. Duration of stay with the patient		
a. >5 years	26	28.90%
b. <5 years	64	71.10%

9. Previous source of knowledge		
a. friends	1	1.10%
b. health professional	70	77.80%
c. mass media	8	8.90%
d. relatives	6	6.70%
e. others	5	5.60%

Table 2: knowledge regarding ECT among caregivers of mentally ill patients before giving Psycho education

(N=90)

Knowledge regarding ECT among caregivers of mentally ill patients	Frequency (f)		Percentage (%)	
	Pre-test	Post -test	Pre-test	Post-test
Adequate knowledge	0	73	0	81.10%
Moderate knowledge	10	13	11.10%	14.40%
Inadequate knowledge	80	4	88.90%	4.40%

Table – 3: Comparison of pre-test mean. SD “t” and p-values scores on knowledge Regarding psycho education on ECT among caregivers of mentally ill patients

(N=90)

Table 3 Shows the comparisons of calculated paired t test values of mean SD and “t” and p-values of pre -test and post- test knowledge regarding psycho education on knowledge regarding ECT among the caregivers of mentally ill revealed that the post –test mean score were 24.79 with a SD of 5.820 and pre-test mean 7.056 with a SD of 2.593 and “t” value of-28.434 were significant at the level of $p < .000$. **RH₁**: The mean post-test knowledge score of caregivers receiving psycho education regarding ECT was significantly higher than the mean pre-test knowledge score is accepted.

Association of pre-test scores on knowledge regarding psycho education on ECT among caregivers of mentally ill patients with socio - demographic variables calculated χ^2 values of the levels of pre- test score among caregivers with their demographic variables revealed that gender at the level of ($p > 0.669$) age at the level of ($p > 0.625$) relationship with the patient at the

level of ($p > 0.175$) education at the level of ($p > 0.364$) occupation at the level of ($p > 0.604$) area of residence at the level of ($p > 0.236$) duration of stay with patient at the level of ($p > 0.490$) previous source of knowledge at the level of ($p > 0.141$) care givers of mentally ill, were not found to be significant. Hence the **RH₂**: There will be significant association between pretest levels of psycho education knowledge regarding ECT with their selected demographic variables among caregivers of mentally ill were not found to be significance” **RH₂** is rejected.

Discussion:

The first objective of the study was to assess and compare the knowledge regarding regarding psycho education on ECT among caregivers of mentally ill patients before and after exposure to psycho education. In the pre-test, the majority of caregivers of mentally ill patients, approximately 80 (88.9%), had inadequate knowledge, while 10 (11.1%) had moderate knowledge, and none had adequate knowledge. Following the post-test, the majority, around 73 (81.1%), had achieved adequate knowledge, 13 (14.4%) had moderate knowledge, and 4 (4.4%) still had inadequate knowledge [7,8].

The second objective of the study was to compare the mean, standard deviation, "t" values, and p-values of pre-test and post-test knowledge scores regarding psychoeducation on ECT among caregivers of mentally ill patients. The Calculated paired “t” test values of mean SD and p-values of pre -test and post- test on knowledge scores on rights of mentally ill reveals that the post –test mean score were 24.79 with a SD of 5.820 and pre-test mean 7.056 with a SD of 2.5937 the “t” value was -28.434 and p value were significant at the level of < 0.000 . Hence the stated hypothesis **RH₁**: The mean post-test knowledge score of caregivers receiving psycho education regarding ECT was significantly higher than the mean pre-test knowledge score is accepted.

The third objective of the study was to explore the association between pre-test knowledge scores regarding psychoeducation on ECT among caregivers of mentally ill patients and their selected demographic variables. The analysis indicated that there were significant associations between the pre-test knowledge scores and certain socio-demographic variables among caregivers. Specifically, gender ($p > 0.669$), age ($p > 0.625$), relationship to the patient ($p > 0.175$), education ($p > 0.364$), occupation ($p > 0.604$), area of residence ($p > 0.236$), duration of stay with the patient ($p > 0.490$), and previous source of knowledge ($p > 0.141$) were identified as significant factors. Thus, the research hypothesis **RH₂** There will be significant

association between pretest levels of psycho education knowledge regarding ECT with their selected demographic variables among caregivers of mentally ill were not found to be significance” H_2 is rejected [9,10].

Conclusion:

The overall percentage and mean score of knowledge regarding effectiveness of psycho education on ECT among the caregivers of mentally ill in post-test was higher than the pre-test. So, it can conclude that psycho- education on ECT was effective in enhancing the knowledge among care givers of mentally ill patients. The analysis revealed that especially with knowledge on psycho education on ECT among care givers of mentally ill patients was in pre-test knowledge score the mean were 7.056 with a SD of 2.593 and in post -test the mean were 24.79 with a SD of 5.820 were significant at the level (<0.05) (i.e. $p = 0.001$). The study reveals that the post-test mean was higher than the pre-test mean indicates that knowledge of care givers was improved through structured teaching programme. The post-test "t" value of -28.434, which is statistically highly significant at $p \leq 0.000$, indicates a substantial increase in knowledge among caregivers. Therefore, the study concludes that psychoeducation on ECT among caregivers of mentally ill patients effectively enhanced their understanding of ECT.

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