



Knowledge and attitude towards electroconvulsive therapy among person with mental illness and caregivers visiting a tertiary care hospital in Marathwada region of Maharashtra.

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ABSTRACT: Electroconvulsive therapy (ECT) is one of the common treatments in psychiatry, which has higher stigmatization among not only patients undergoing ECT but also common people due to negative attitudes toward this treatment (1). Despite the multiple benefits of this therapeutic approach, it causes anxiety for patients and their family. Hence it is necessary to assess the knowledge and attitude of person with mental illness and caregivers towards ECT, so that we can increase the awareness and bust the myths..

KEYWORDS: ECT, knowledge, attitude, patient, caregiver.

I. INTRODUCTION:

ECT is used in the treatment of many major psychiatric disorders like major depressive disorder, mania, schizophrenia with acute exacerbation or catatonic subtype, schizoaffective disorder and many other psychiatric conditions. Though it is safe and effective, worldwide, the general public has a negative perception of ECT, with regard to its safety and ethics (2-4). One reason for the public's negative views and misunderstanding of ECT may relate to the inaccurate depiction of ECT in movies and TV programs (5). Today ECT has evolved into a modern procedure with a benign side effect profile, which is performed under anaesthesia and the administration of muscle relaxant (6). Despite the developments and changes that have taken place in the past decades, images drawn from those early years of ECT like unmodified and regressive treatment techniques and their consequent unwanted effects persist in the public's mind. Major goal for all clinicians who work with patients receiving ECT should be to educate the public and those they train about the treatment and to close the gap between reality and distortion (7). Hence it is necessary to assess the knowledge and attitude of person with

mental illness and caregivers towards ECT so that measures can be taken to increase the awareness among them and reduce the stigma associated with it.

AIM: To assess knowledge and attitude towards ECT among person with mental illness and caregivers visiting a tertiary care hospital in Marathwada region of Maharashtra.

II. MATERIAL AND METHODS:

Study design: Cross sectional observational study.

Study setting: Outpatient Department of Psychiatry at Dept of Psychiatry GMCH Aurangabad.

Study population: The study population included all patients and caregivers visiting Psychiatric OPD of in Government Medical College, Aurangabad.

Inclusion criteria:

Patients and caregivers visiting Psychiatric OPD of in Government Medical College, Aurangabad

Exclusion criteria:

Not willing to participate in study. Incomplete Questioners.

Sampling technique: Convenient sampling technique used for data collection

Sample Size: n=209 (patients- 107, caregivers- 102)

Approval for the study:

Written approval from Institutional Ethics committee was obtained beforehand. Written approval of Psychiatry department was obtained. After obtaining informed consent from parents of patient, such subjects were included in the study

Methods of Data Collection and Questionnaire:

Predesigned and semi structured questionnaire was used.

Questionnaires included- number of questions under the headings:

A) Sociodemographic details- age, sex, address, education, occupation and marital status.



- B) Knowledge about ECT.
- C) Attitude towards ECT.

Data entry and analysis:

The data were entered in Microsoft Excel and data analysis was done by using SPSS demo

version no 21 for windows. The analysis was performed by using percentages in frequency tables, Correlation of with various variable $p < 0.05$ was considered as level of significance using the Chi-square test. For every correct answer score 2, wrong answer score 1 and for don't know score 0.

III. RESULTS AND OBSERVATIONS:

Demographic Data		Patients	Caregiver
Age Group	Adult	98 (91.59)	78 (76.47)
	Senior Adult	9 (8.41)	24 (23.53)
Gender	Female	30 (28.04)	43 (42.16)
	Male	77 (71.96)	59 (57.84)
Address	Urban	70 (65.42)	61 (59.80)
	Rural	37 (34.58)	41 (40.20)
Education	Illiterate	21 (19.63)	25 (24.51)
	Primary	9 (8.41)	24 (23.53)
	Secondary	31 (28.97)	17 (16.67)
	Higher Secondary	30 (28.04)	15 (14.71)
	Graduate	15 (14.02)	11 (10.78)
	Post- Graduate	1 (0.93)	10 (9.80)
Occupation	Un-employed	37 (34.58)	20 (19.61)
	Un-Skilled	15 (14.02)	11 (10.78)
	Semi-skilled	14 (13.08)	30 (29.41)
	Skilled	36 (33.64)	25 (24.51)
	Professional	5 (4.67)	16 (15.69)
Marital status	Un-Married	26 (24.30)	17 (16.67)
	Married	63 (58.88)	69 (67.65)
	Separated	8 (7.48)	2 (1.96)
	Divorcee	6 (5.61)	4 (3.92)
	Widow	4 (3.74)	10 (9.80)

(Values in parenthesis is percentages)

Table 2 : Knowledge Regarding ECT among Patients

Responses of Patients	Don't Know	Yes	No
Do you know that informed consent is necessary before giving ECT	104 (97.19)	1 (0.93)	2 (1.86)
Are there any side effects of ECT	103 (96.26)	2 (1.86)	2 (1.86)
Do you know that anaesthesia is given before giving ECT	105 (98.13)	1 (0.93)	1 (0.93)
Do you think that ECT damages brain	104 (97.19)	3 (2.80)	0 (0.00)
Do you think ECT Damages any other body part	105 (98.13)	2 (1.86)	0 (0.00)

(Values in parenthesis is percentages)



Table 3 : Knowledge Regarding ECT among Caregivers

Responses of Caregiver	Don't Know	Yes	No
Do you know that informed consent is necessary before giving ECT	70 (68.62)	28 (27.45)	4 (3.92)
Are there any side effects of ECT	78 (76.47)	9 (8.82)	15 (14.70)
Do you know that anaesthesia is given before giving ECT	69 (67.64)	27 (26.47)	5 (4.90)
Do you think that ECT damages brain	92 (90.19)	6 (5.88)	4 (3.92)
Do you think ECT Damages any other body part	95 (93.13)	0 (0.00)	7 (6.86)

(Values in parenthesis is percentages)

Fig 1 : Adequate Knowledge and correct attitude towards ECT among patients and caregivers.

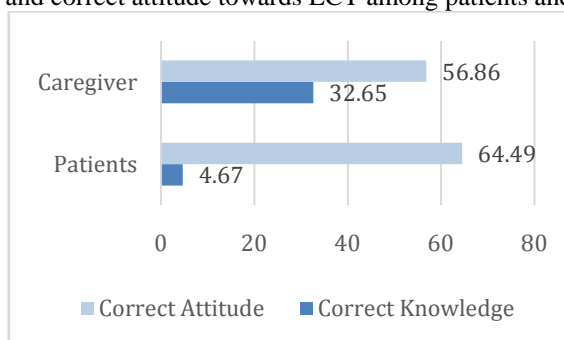


Fig 1 shows correct attitude and correct knowledge among patients and caregivers

Mean score for knowledge among patients & caregivers is 2. Score above 2 shows correct knowledge about ECT & vice versa.

Mean score for attitude is 8 in patients and 10 in caregivers. Score above 8 in patients and above 10 in caregivers shows correct attitude towards ECT.

Table 4 : Association of patients and caregivers with knowledge about ECT

	KNOWLEDGE		p Value
	Correct	In-correct	
Patients	5 (4.67)	102 (95.32)	0.0 0
Caregiver	33 (32.35)	69 (67.64)	

(Table 4 shows statistically highly significant incorrect knowledge about ECT is in patients.

Table 5 : Association of patients and caregivers with attitude towards ECT

	ATTITUDE		p Value
	Correct	In-correct	
Patients	69 (64.48)	38 (35.51)	0.10
Caregiver	58 (56.86)	44 (43.13)	

(Values in parenthesis is percentages)

Table 5 shows there is no significant association with attitude towards ECT.



Table 6 : Factors associated with correct knowledge about ECT among patients

		KNOWLEDGE		p Value
Patients		Correct	In-correct	
AgeGroup	Adult	4 (83.33)	94 (92.15)	0.453
	Senior Adult	1 (16.66)	8 (7.84)	
Gender	Female	2 (40.00)	28 (27.45)	0.54
	Male	3 (60.00)	74 (72.54)	
Address	Urban	4 (80.00)	66 (64.72)	0.48
	Rural	1 (20.00)	36 (35.29)	
Education	Illiterate	1 (20.00)	20 (19.60)	0.80
	Primary	1 (20.00)	8 (7.84)	
	Secondary	1 (20.00)	30 (29.41)	
	College	2 (40.00)	44 (43.13)	
Marital status	Un-Married	1 (20.00)	25 (24.50)	0.086
	Married	1 (20.00)	62 (60.78)	
	Separated	1 (20.00)	7 (6.86)	
	Divorcee	1 (20.00)	5 (4.90)	
	Widow	1 (20.00)	3 (2.94)	

(Values in parenthesis is percentages)

Table 6 shows no any significant association with knowledge about ECT among Patients.

Table 7 : Factors associated with correct attitude towards ECT among patients

		ATTITUDE		p Value
Patients		Correct	In-correct	
Age Group	Adult	61 (88.40)	37 (97.36)	0.10
	Senior Adult	8 (11.59)	1 (2.63)	
Gender	Female	16 (23.18)	14 (36.84)	0.132
	Male	53 (76.81)	24 (63.15)	
Address	Urban	47 (68.11)	23 (60.52)	0.42
	Rural	22 (31.88)	15 (39.47)	
Education	Illiterate	5 (7.24)	16 (42.10)	0.0000
	Primary	4 (5.79)	5 (13.15)	
	Secondary	17 (24.63)	14 (36.84)	
	College	43 (62.31)	3 (7.89)	
Occupation	Un-employed	7 (10.14)	30 (78.94)	0.000
	Un-Skilled	13 (18.84)	2 (5.26)	
	Semi-skilled	12 (17.39)	2 (5.26)	



	Skilled	34 (49.27)	2 (5.26)	
	Professional	3 (4.34)	2 (5.26)	
Marital status	Un-Married	11 (15.94)	15 (39.47)	0.06
	Married	43 (62.31)	20 (52.63)	
	Separated	7 (10.14)	1 (2.63)	
	Divorcee	5 (7.24)	1 (2.63)	
	Widow	3 (4.31)	1 (2.63)	

(Values in parenthesis is percentages)

Table 7 shows statistically highly significant association of attitude towards ECT with education and occupation of patient.

Table 8 : Factors associated with correct knowledge about ECT among caregivers

		KNOWLEDGE		p Value
Caregiver		Correct	In-correct	
Age Group	Adult	28 (84.84)	50 (72.46)	0.16
	Senior Adult	5 (15.15)	19 (27.53)	
Gender	Female	13 (39.39)	30 (43.47)	0.69
	Male	20 (60.60)	39 (56.52)	
Address	Urban	28 (84.84)	33 (47.82)	0.00036
	Rural	5 (15.15)	36 (52.17)	
Education	Illiterate	1 (3.03)	24 (34.78)	0.000
	Primary	6 (18.18)	18 (26.08)	
	Secondary	3 (9.09)	14 (20.28)	
	College	23 (69.69)	13 (18.84)	
Occupation	Un-employed	2 (6.06)	18 (26.08)	0.0000
	Un-Skilled	4 (12.12)	7 (10.14)	
	Semi-skilled	6 (18.18)	24 (34.48)	
	Skilled	9 (27.27)	16 (23.18)	
	Professional	12 (36.36)	4 (5.79)	

(Values in parenthesis is percentages)

Table 8 shows Statistically highly significant association of knowledge about ECT with area they are living, education and occupation among caregivers.



Table 9 : Factors associated with correct attitude towards ECT among caregivers

		ATTITUDE		p Value
Caregiver		Correct	In-correct	
Age Group	Adult	45 (77.58)	33 (75.00)	0.76
	Senior Adult	13 (22.41)	11 (25.00)	
Gender	Female	21 (36.20)	22 (50.00)	0.162
	Male	37 (63.79)	22 (50.00)	
Address	Urban	40 (68.96)	21 (47.72)	0.03
	Rural	18 (31.03)	23 (52.27)	
Education	Illiterate	9 (15.51)	16 (36.36)	0.000864
	Primary	11 (18.96)	13 (29.54)	
	Secondary	8 (13.79)	9 (20.45)	
	College	30 (18.96)	6 (13.63)	
Occupation	Un-employed	10 (17.24)	10 (22.72)	0.011
	Un-Skilled	6 (10.34)	5 (11.36)	
	Semi-skilled	12 (20.68)	18 (40.90)	
	Skilled	15 (25.86)	10 (22.72)	
	Professional	15 (25.86)	1 (2.27)	
Marital status	Un-Married	9 (15.51)	8 (18.18)	0.39
	Married	42 (72.41)	27 (6.13)	
	Separated	1 (1.72)	1 (2.27)	
	Divorcee	3 (5.17)	1 (2.27)	
	Widow	3 (5.17)	7 (15.90)	

(Values in parenthesis is percentages)

Table 9 shows Statistically significant association of attitude towards ECT with area they are living and occupation among caregivers. Also showing highly significant association with education of caregivers.

IV. DISCUSSION-

- Knowledge is poor in both patients and caregivers but comparatively caregivers have more knowledge.
- Attitude is also negative towards ECT. Those living in urban areas have more positive attitude as compared to those living in rural areas.
- Poor knowledge and negative attitude toward ECT is also found in different studies in past (8-10). It has been found that ECT knowledge

score significantly predicts the ECT attitude score (11).

- Certain studies have found a positive attitude in patients and relatives despite little knowledge of this treatment modality (12-13).
- There is a need to increase knowledge and attitude toward ECT in general public which is by providing more basic information and its effectiveness.

V. CONCLUSION-

- Study found that knowledge is poor among both caregivers and patient.
- Attitude of patients and caregivers who have done schooling till secondary school or higher and those who are skilled workers and



professionals is positive towards ECT. This can be due to increase awareness among them. We can use different forms of media and platforms to increase awareness about ECT in all sections of society, so that the attitude of people changes towards ECT.

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