ORIGINAL ARTICLE

ECT: Knowledge and Attitude among Patients and their Relatives

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Abstract

Introduction: *There is widespread negative view of ECT in common people and other medical fraternities. Clinical efficacy of ECT does not necessarily predict patients and relatives knowledge and attitude regarding the procedure.*

Materials and methods: *This is a cross-sectional, retrospective study. Socio-demographic data of patients and relatives were collected. Knowledge, attitude and experience toward ECT were assessed by using an internationally validated instrument.*

Results: *Majority of patients and relatives replied positively that they could have refused ECT if wanted to; they received adequate information from health professionals in giving consent to ECT, therapeutic uses, processes and side effects / risks of ECT. All agreed that viewing video tapes before treatment would have been helpful. Almost all patients and relatives agreed that- ECT is not used as punishment; it does not cause permanent brain damage; ECT is not dangerous; it is given only if patients agree; patients have full autonomy about its use and it is not used to control their behavior. All patients and relatives disagreed that ECT is inhumane; it's cruel; illegitimate; should be outlawed. All agreed that they felt satisfied with ECT and glad it was given to their relatives.*

Conclusion: *It is very important to give reliable and adequate information to patients and relatives about ECT. After beneficial effects of ECT and improvement in post-ECT psychopathology, subjects will have favorable attitude and increased satisfaction toward ECT. Positive experience of treatment will have enduring impact on subjects' perceptions. Information leaflets and audio-visual aids play additional benefit when given information about the procedure.*

Keywords: Knowledge & Attitude, ECT, Patient's relative

INTRODUCTION

Electroconvulsive therapy (ECT) has been successfully used for than 70 years. Despite being safe and efficacious in various psychiatric disorders, it is the most controversial and misunderstood treatment in medical field[1, 2, 3]. ECT has significant impact on life threatening psychiatric morbidities- suicidal, catatonic stupor, treatment resistant and homicidal patients. With advancement in technology leading to use of safer ECT machines, improvement in anesthetics, muscle relaxant and pain management have led to the ECT procedure very safe and comfortable to patients [4]. Ironically there is widespread negative view of ECT in common people and other medical fraternities. This are various reasons- irrational fear of electricity, primitive practices in the past (but new ECT machine has been in use for last 30 years) [5], negative media representations- in mass media and in popular films [6, 7]. ECT has falsely been epitomized as a symbol of repressive, authorities and inhuman behavior toward innocent and exploited [8]. Researches in ECT have focused on various aspects- efficacy, side effects, mechanism of action. But clinical efficacy of ECT does not necessarily predict

patients and relatives knowledge and attitude regarding the procedure. No studies have been done in Nepal about patients and relatives knowledge, attitude and experience (labeled as KAE in subsequent paragraph) concerning ECT treatment.

Present study was deemed necessary as psychiatric treatment; especially ECT has come under increasing scrutiny by ill-informed patients' advocates and human right groups, who consider it inhuman, harmful and ineffective treatment[9, 10]. This is a first type of study that is done in Nepal.

MATERIAL AND METHOD

This is a cross-sectional, retrospective study done in the medical college. All patients who were admitted in psychiatry ward and their relatives were requested to participate in the study. Ethical approval was taken from Institutional Review Board (IRB) along with Nepal Health Research Council (NHRC).

Socio-demographic data of patients and relatives were collected including age, sex, marital status, education and occupation. Data regarding duration of illness, number of psychiatric admission, ECT courses, current medications were collected from patients.

Knowledge, attitude and satisfaction (or experience) toward ECT (KAE) were assessed by using an instrument developed by Freeman and Kendell[11]. With permission from the instrument developer, original questionnaire was reviewed. Back to back translation was done to standardize the instrument in Nepali set-up. The possible responses for each item on the questionnaire were- "agree/yes", "disagree/no" and "I don't know" in questions about "information given by health professionals about ECT"; "strongly disagree", "moderately disagree", "don't know/can't say", "moderately agree" and "strongly agree" in questions about "knowledge and attitude regarding ECT" and "subjective perception regarding ECT".

All the hospitalized patients and their relatives were assessed regardless of them receiving ECT or not and unless they refused to consent. Patients' diagnosis and other psychopathologies were also assessed using different instruments. Subjects were assessed two weeks later after their last ECT and those who did not receive ECT, were assessed during hospitalized.

RESULT

As shown in table1, 21 patients who received ECT (as ECT-Receivers) 25 patients who did not receive ECT (as ECT Non-Receivers) participated in this study. Twenty five relatives (of ECT-Receivers) and 30 relatives (of ECT Non-Receivers) also participated in this table. This table also shows gender and age wise distribution of patients and relatives who were both ECT receivers and non-receivers and their relatives.

In table 2, majority of patients and relatives replied positively and agreed about information given by health professionals about ECT [table 2, (A)]. All answered positively that they could have refused ECT if wanted to; they received adequate information from health professionals in giving consent to ECT, therapeutic uses, processes and side effects / risks of ECT. All agreed that viewing video tapes before treatment would have been helpful. Regarding knowledge and attitude of ECT (table 2, (B)], majority of patients and their relatives appeared quite knowledgeable and had positive attitude towards ECT. Almost all patients and relatives agreed that- ECT is not used as punishment; it does not cause permanent brain damage; ECT is not dangerous; it is given only if patients agree; patients have full autonomy about its use and it is not used to control their behavior. Table 2 (C) shows patients and relatives subjective perception regarding ECT- almost all disagreed that ECT is inhumane; it's cruel; illegitimate; should be outlawed; it's outdated. All agreed that they felt satisfied with ECT and glad it was given to their relatives; they will advise their other relatives if required and will receiver again if recommended by doctor.

TABLE 1: Socio-demographic Profile of patients and relatives who responded in ECT use questionnaire

	ECT Receivers		ECT Non-Receivers	
Gender	Patient	Relative	Patient	Relative
Male	11	12	11	17
Female	10	13	14	13
Total	**21**	**25**	**25**	**30**
Age (Years)				
10-19	4	3	1	1
20-29	8	10	7	7
30-39	6	9	9	10
40-49	3	3	4	6
50-59	0	0	4	6
>60	0	0	0	0
Total	**21**	**25**	**25**	**30**

TABLE 2 Patients and relatives responses to various questions regarding information given by health professionals; knowledge and attitude regarding ECT and subjective perception regarding ECT

S. No	QUESTIONS	Patients Answer			Relatives Answer		
	Information given by health professionals about ECT	Yes	No	Don't Know	Yes	No	Don't Know
1.	Do you think you could have refused to have ECT had you wanted to?	40	6	0	55	0	0
2.	Did you receive adequate information from health professionals before giving consent?	39	7	0	55	0	0
3	Do you think health professionals provide adequate information concerning reasons to have ECT?	46	0	0	55	0	0
4	Do you think health professionals provide adequate information concerning the therapeutic effects of ECT?	46	0	0	55	0	0
5	Do you think health professionals provide adequate information concerning the process of ECT?	39	7	0	55	0	0
6	Do you think health professionals provide adequate information concerning the side effects of ECT?	46	0	0	55	0	0
7	Do you think health professionals provide adequate information concerning the risks of ECT?	46	0	0	55	0	0
8	Do you think viewing a videotape before treatment would have been helpful?	46	0	0	55	0	0

Knowledge and Attitude regarding ECT		**Strongly Disagree**	**Moderately Disagree**	**Cannot Say**	**Moderately Agree**	**Strongly Agree**	**Strongly Disagree**	**Moderately Disagree**	**Cannot Say**	**Moderately Agree**	**Strongly Agree**
1	ECT is used to punish patients	41	5	0	5	0	55	0	0	0	0
2.	During an ECT session, patients are awake.	41	0	5	0	0	55	0	0	0	0
3	During an ECT session, patients experience pain other than the needle prick.	1	0	25	5	15	52	3	0	0	0
4	During an ECT session, patients do not receive general anesthesia.	27	14	1	0	4	52	3	0	0	0
5	ECT leads to permanent memory impairment.	39	4	0	3	0	53	2	0	0	0
6	ECT is unsafe.	46	0	0	0	0	53	2	0	0	0
7	ECT should not be used to treat schizophrenia.	45	1	0	0	0	52	3	0	0	0
8	ECT works by decreasing memory so that the patient forgets the things that are bothering him or her.	45	1	0	0	0	52	3	0	0	0
9	ECT is more dangerous than drugs.	45	0	0	1	0	53	2	0	0	0
10	During an ECT session, patients do not have a seizure.	4	2	0	40	0	53	2	0	0	0
11	ECT usually is given only if the patient agrees.	0	0	0	29	17	0	0	0	0	52
12	ECT should be used to treat depression	0	0	0	34	12	0	0	0	27	28
13	ECT does not lead to permanent damage to other body parts.	0	0	0	0	46	0	0	0	26	29
14	ECT does not lead to permanent brain damage.	0	0	0	0	46	0	0	0	26	29
15	ECT should not be used to control patients' behavior.	0	0	0	0	46	0	0	0	26	29
16	Patients can withdraw consent for ECT at any time.	0	0	0	0	46	0	0	0	28	27
17	During an ECT session, muscle relaxants are given.	0	0	0	0	46	0	0	0	30	25
C)Subjective perception regarding ECT											
1	ECT is inhumane.	46	0	0	0	0	31	24	0	0	0
2	ECT is cruel.	46	0	0	0	0	32	23	0	0	0
3	ECT is illegitimate.	46	0	0	0	0	28	27	0	0	0
4	ECT should be outlawed.	46	0	0	0	0	29	26	0	0	0
5	ECT is outdated.	45	0	0	1	0	30	25	0	0	0
6	ECT is best restricted to a treatment of last resort.	40	0	0	6	0	31	22	2	0	0
7	I am glad that I/my relative received ECT.	0	0	0	17	29	0	0	0	0	0
8	I will advise my relative to receive it if recommended by a doctor.	0	0	0	16	30	0	0	0	25	30
9	I will receive it again if recommended by a doctor.	0	0	0	7	39	0	0	0	27	31

DISCUSSION:

Some studies claim subjects' poor knowledge about ECT. Of the total subjects assessed, KAE about ECT ranges as 6%[12], 7%[13], 8%[14], 15%[15], 17%[16], 23%[9], 59%[17]. This study gives evidence of wider KAE among patients and their relatives (written as "subjects" in subsequent paragraphs) toward ECT. The reasons may be due to pre-ECT counseling. Being medical college, even subjects who did not have ECT had "some details" of ECT procedure as it is compulsory to keep family members when patient get admitted in the hospital. This had certain advantage as "patient and family" are involved in patient's management and decision making process and consent. As in some international studies, this study also found subjects' KAE adequate and satisfactory. Many subjects explained they got adequate information regarding ECT / they found it very beneficial and most of them have positive attitudes toward ECT[11, 12, 13]. Rates of benefit ranged from 50% to 100% (average 71%) [18, 19, 20, and 21.] Subject in some studies (53% to 98%, average 70%) perceived ECT agreed its beneficial effects and willing to do ECT again if required[13, 22, 23, 24, 25]. But knowledge of ECT among subjects is about "gross knowledge" about ECT. But this proportion of knowledge does not correspond to full understanding regarding finer details- placement of electrodes / duration of stimulus, side effects, indications, induction of seizure, and use of muscle relaxants.

Patients' KAE toward ECT is based on broader considerations than mere relief of symptoms and it is shaped by existing socio-cultural concepts. Not all studies showed positive results. In some studies show patients perceiving lower benefit of ECT[26], expressing negative attitudes regarding ECT[14, 27, 28, 29, 30]. As compared to patients, relatives perceived that they were properly informed about ECT. Reason may be due to patient's mental status prior to ECT, due to which they were not able to retain new information which they were not able to retain new information properly. But despite this contrasting findings, both groups of sample "felt" satisfied with adequate information received about ECT[6, 11, 31, 32].

CONCLUSION:

It is very important to give reliable and adequate information to patients and relatives about ECT. This will lead to subjects adequate and detail knowledge about ECT. After beneficial effects of ECT and improvement in post-ECT psychopathology, subjects will have favorable attitude and increased satisfaction toward ECT. Positive experience of treatment will have enduring impact on subjects' perceptions, ECT should be used only when indicated[5]. Information leaflets and audio-visual aids play additional benefit when given information about the procedure; especially visual demonstrations are very valuable. All the information must be provided by professionals who will perform ECT. Recent evidences have suggested that stress and discomfort associated with procedure can be considerably lessened by adhering to certain minimum standards of care[5, 25, 33, and 34]. Basic standard of care includes reduced waiting time for ECT, provision of clean, comfortable environments, practical and emotional support by dedicated staffs. Families of patients should always be involved in the treatment process as it will enhance the ECT satisfaction, better experience and positive attitude.

Mental health professionals should always have to be aware that subjects should not sign the consent form for ECT under duress. Rather than banning the treatment, excessive and unregulated use of ECT has to be restricted. Mental health professionals must take responsibility of educating other medical professionals and public about the in-depth information and effectiveness of ECT, more seriously, rather than making it "stigmatizing procedure" and ridiculing it.

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