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Study to assess the effectiveness of structured teaching programme on knowledge and practice regarding electro convulsive therapy among the G.N.M 2nd year students studying in selected Schools of Nursing, Tumkur.

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A pre experimental one group pre-test post-test study was conducted to assess the effectiveness of structured teaching programme on knowledge and practice regarding electro convulsive therapy among 60 GNM 2nd year students studying in selected Schools of Nursing, Tumkur, Karnataka by using purposive sampling technique. Structured questionnaire and checklist was used to assess the knowledge and practice of the students. The findings of the study revealed that the mean post test scores were significantly higher than mean pre test scores.
***Keywords**: Structured Teaching Programme, Electro convulsive therapy, Students.*

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I. It is more dangerous to drive to the hospital than to have the treatment. The unfair stigma against ECT is denying remarkably effective medicine treatment to patients who need it.

Electro-convulsive therapy, or ECT, is a medical treatment that has been used for many decades for a number of psychiatric conditions. The treatment involves placing electrodes on the temples, on one or both sides of the patient's head, and delivering a small electrical current across the brain, with the patient sedated or under anaesthetic. The aim is to produce a seizure lasting up to a minute, after which the brain activity should return to normal. Patients may have one or more treatment a week and perhaps more than a dozen treatments in total.

About 70 percent of ECT patients are women, since they are at twice the risk of depression than are men. Although a large amount of research has been carried out, the exact mechanism of action of ECT remains elusive, and ECT on its own does not usually have a sustained benefit. There is a significant risk of memory loss with ECT. It is widely acknowledged internationally that obtaining the written, informed consent of the patient is important before ECT is administered Experts disagree on when ECT should be used as a first-line treatment or if it should be reserved for patients who have not responded to other interventions such as medication and psychotherapy**.**

Modern day ECT is safe and effective. It can relieve symptoms of the most severe forms of depression more effectively than medication or therapy. ECT has undergone a complete image make over in last 20 years. It has regained its respectability now a day. Many psychiatrists now consider it an effective and efficient way to relieve severe depression or to break a manic cycle. Its success rate according to American Nursing Association (APA), is 80%, considerably higher than the 50% to 60% success rate of most antidepressant medication.

Objectives of the study

- To assess the existing knowledge of G.N.M 2nd year students regarding Electro Convulsive Therapy.
- To identify the practice of Electro Convulsive Therapy among G.N.M 2nd year students
- To administer structured teaching programme on Electro Convulsive Therapy to G.N.M 2nd year students studying in selected schools of Nursing, Tumkur.
- To evaluate effectiveness of structured teaching programme among G.N.M 2nd year students studying in selected schools of Nursing, Tumkur.
- To find out the association between pre test and post test scores on knowledge and practice of G.N.M 2nd year students regarding ECT with selected demographic variables.

II. Materials and Methods

The study was conducted to assess the effectiveness of Structured Teaching Programme on knowledge and practice regarding Electro-Convulsive Therapy among GNM 2nd year students studying in selected Schools of Nursing, Tumkur, Karnataka. Pre experimental (One Group Pretest Posttest) research design was used in the study by using purposive sampling technique and sample size was 60. The data collection was done by using

structured questionnaire and checklist. Collected data was analyzed by using descriptive and inferential statistics.

S.No	Demographic variables	No	%
1	Age		
	a. 19--20 years	31	51.67
	b. 21-- 22 years	16	26.67
	c. 23 and above years	13	21.66
2	Gender		
	a. Female	35	58.33
	b. Male	25	41.67
3	Religion		
	a. Hindu	22	36.67
	b. Muslim	10	16.66
	c. Christian	28	46.67
4	Attended any educational programme		
	a. Workshop	16	26.67
	b. Seminars/Conference	30	50.00
	c. No	14	23.33
5	Source of awareness of ECT		
	a. Television	12	20.00
	b. Literature	16	26.67
	c. Class attended	32	53.33
6	Type of hospital for practical experienced		
	a. Govt Mental Hospital	36	60.00
	b. Private/ Mission mental hospital	24	40.00
7	Your experienced in ECT room		
	a. One week	25	41.67
	b. Two week	25	41.67
	c. More than three week	10	16.66

III. Results

It is observed from the present study that the mean as well as the standard deviation of the knowledge on Electroconvulsive therapy during the pretest is 7.1and 3.4 and during the posttest it is 19.27 and 2.6. The difference in the mean knowledge score on Electroconvulsive therapy is statistically significant (<0.001)

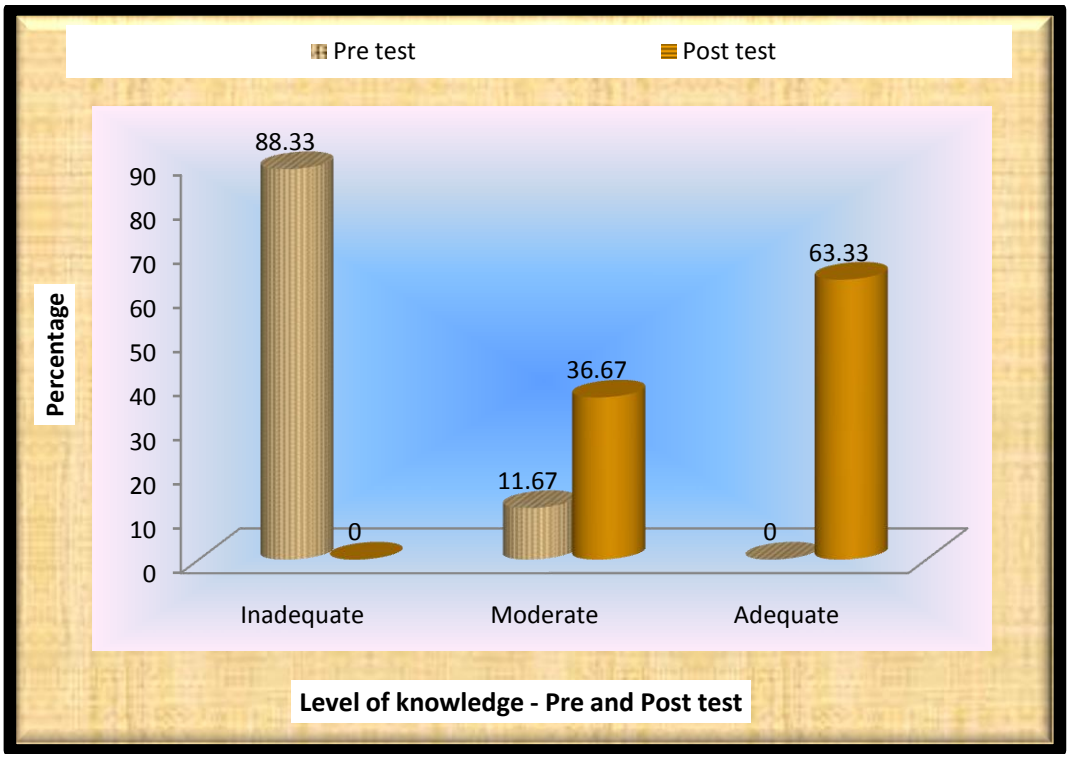
It is observed from the present study that the mean as well as the standard deviation of the practice on Electroconvulsive therapy during the pretest is 5.7 and 1.97 and mean percentage is 38% and during the posttest it is 11.9 and 1.5 and mean percentage is 79.3%. The difference in the mean practice score on Electroconvulsive therapy is statistically significant (<0.001)

Domain	**Mean**	**SD**	**Mean%**	**Paired 't' test**
Pre test	7.1	3.4	28.4	
Post test	19.27	2.6	77.08	**22.22****
Improvement	12.17	4.2	48.68	

**Significant at P<0.01 level, df 59, t value 2.0

Comparison between pre and post- test results of the students knowledge regarding Electro convulsive therapy.

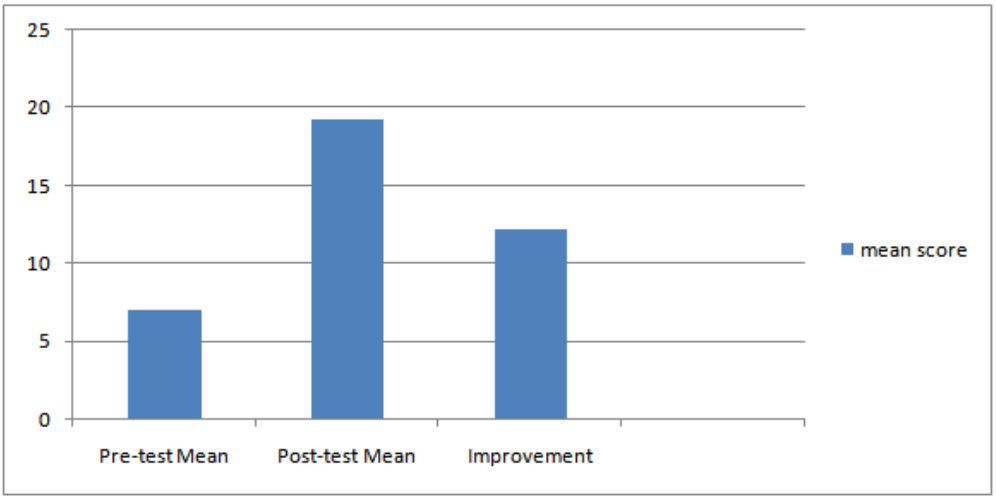
Level of Knowledge	Score	Pre test		Post test	
		Frequency	%	Frequency	%
Inadequate	< 50%	53	88.33	0	0.00
Moderate	50--75%	7	11.67	22	36.67
Adequate	> 75%	0	0.00	38	63.33
Total		60	100	60	100



Comparison of descriptive statistics of practice regarding electro convulsive therapy before and after STP

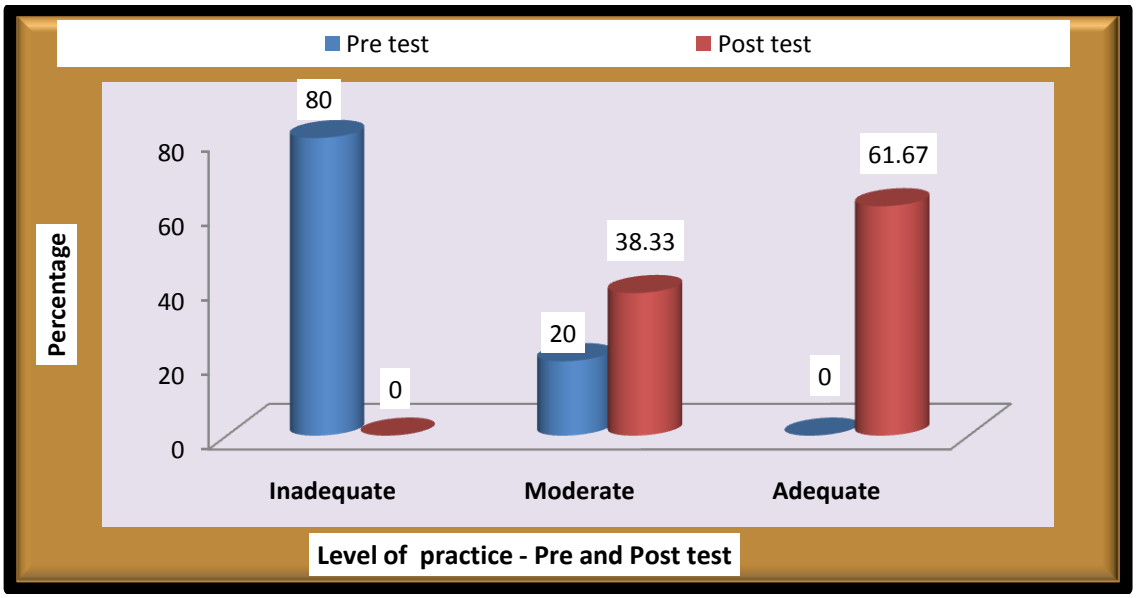
Domain	Mean	SD	Mean%	Paired 't' test
Pre test	5.7	1.97	38	**17.9****
Post test	11.9	1.5	79.3	
Improvement	6.20	2.7	41.3	

**Significant at P<0.01 level, df 59, t value 2.0



Comparison between pre and post- test results of the students practice regarding Electro convulsive therapy

Level of Practice	Score	Pre test		Post test	
		No	%	No	%
Inadequate	< 50%	48	80.00	0	0.00
Moderate	50--75%	12	20.00	23	38.33
Adequate	> 75%	0	0.00	37	61.67
Total		60	100	60	100



Association between pre test knowledge and demographic variables

S.No	Demographic variables	No	%	Level of knowledge				Chi-square test
				≤ Median (31)		> Median (29)		
				No	%	No	%	
1	Age							
	a. 19--20 years	31	51.67	20	64.5	11	37.9	6.32
	b. 21-- 22 years	16	26.67	8	25.8	8	27.6	df 2
	c. 23 and above years	13	21.66	3	9.7	10	34.5	***S***
2	Gender							
	a. Female	35	58.33	17	54.8	18	62.1	0.32
	b. Male	25	41.67	14	45.2	11	37.9	df 1 N.S
3	Religion							
	a. Hindu	22	36.67	16	51.6	6	20.7	8.5
	b. Muslim	10	16.66	6	19.4	4	13.8	df 2
	c. Christian	28	46.67	9	29.0	19	65.5	**S**
4	Attended any educational programme							
	a. Workshop	16	26.67	8	25.8	8	27.6	3.1
	b. Seminars/Conference	30	50.00	13	41.9	17	58.6	df 2
	c. No	14	23.33	10	32.3	4	13.8	N.S
5	Source of awareness of ECT							
	a. Television	12	20.00	7	22.6	5	17.2	6.27
	b. Literature	16	26.67	12	38.7	4	13.8	df 2
	c. Class attended	32	53.33	12	38.7	20	69.0	**S**
6	Type of hospital for practical experienced							
	a. Govt Mental Hospital	36	60.00	21	67.7	15	51.7	1.6
	b. Private/ Mission mental hospital	24	40.00	10	32.3	14	48.3	df 1 N.S
7	Your experienced in ECT room							
	a. One week	25	41.67	17	54.8	8	27.6	4.57
	b. Two week	25	41.67	10	32.3	15	51.7	df 2
	c. More than three week	10	16.66	4	12.9	6	20.7	N.S

N.S- Not significant at p>0.05 level S- Significant at P<0.05 level

Association between pre test practice and selected demographic variables

S.No	Demographic variables	No	%	Level of practice				Chi square test
				≤ Median (30)		> Median (30)		
				No	%	No	%	
1	Age							
	a. 19--20 years	31	51.67	18	60.0	13	43.3	1.8
	b. 21-- 22 years	16	26.67	7	23.3	9	30.0	df 2
	c. 23 and above years	13	21.66	5	16.7	8	26.7	N.S
2	Gender							
	a. Female	35	58.33	13	43.3	22	73.3	5.55
	b. Male	25	41.67	17	56.7	8	26.7	df 1 **S**
3	Religion							
	a. Hindu	22	36.67	12	40.0	10	33.3	3.1
	b. Muslim	10	16.66	7	23.3	3	10.0	df 2

	c. Christian	28	46.67	11	36.7	17	56.7	N.S
4	Attended any educational programme							
	a. Workshop	16	26.67	9	30.0	7	23.3	8.15
	b. Seminars/Conference	30	50.00	10	33.3	20	66.7	df 2
	c. No	14	23.33	11	36.7	3	10.0	**S**
5	Source of awareness of ECT							
	a. Television	12	20.00	6	20.0	6	20.0	3.38
	b. Literature	16	26.67	11	36.7	5	16.7	df 2
	c. Class attended	32	53.33	13	43.3	19	63.3	N.S
6	Type of hospital for practical experienced							
	a. Govt Mental Hospital	36	60.00	18	60.0	18	60.0	2.5
	b. Private/ Mission mental hospital	24	40.00	12	40.0	12	40.0	df 1 N.S
7	Your experienced in ECT room							
	a. One week	25	41.67	14	46.7	11	36.7	1.76
	b. Two week	25	41.67	10	33.3	15	50.0	df 2
	c. More than three week	10	16.66	6	20.0	4	13.3	N.S

N.S- Not significant at p>0.05 level S- Significant at P<0.05 level

Association between post test knowledge and selected demographic variables

S.No	Demographic variables	No	%	Level of knowledge				Chisquare test
				≤ Median (39)		> Median (21)		
				No	%	No	%	
1	Age							
	a. 19--20 years	31	51.67	25	80.6	6	20.7	10
	b. 21-- 22 years	16	26.67	10	32.3	6	20.7	df 2
	c. 23 and above years	13	21.66	4	12.9	9	31.0	***S***
2	Gender							
	a. Female	35	58.33	22	71.0	13	44.8	0.17
	b. Male	25	41.67	17	54.8	8	27.6	df 1 N.S
3	Religion							
	a. Hindu	22	36.67	17	54.8	5	17.2	2.3
	b. Muslim	10	16.66	6	19.4	4	13.8	df 2
	c. Christian	28	46.67	16	51.6	12	41.4	N.S
4	Attended any educational programme							
	a. Workshop	16	26.67	9	29.0	7	24.1	0.83
	b. Seminars/Conference	30	50.00	20	64.5	10	34.5	df 2
	c. No	14	23.33	10	32.3	4	13.8	N.S
5	Source of awareness of ECT							
	a. Television	12	20.00	8	25.8	4	13.8	0.21
	b. Literature	16	26.67	11	35.5	5	17.2	df 2
	c. Class attended	32	53.33	20	64.5	12	41.4	N.S
6	Type of hospital for practical experienced							
	a. Govt Mental Hospital	36	60.00	27	87.1	9	31.0	3.95

	b. Private/ Mission mental hospital	24	40.00	12	38.7	12	41.4	df 1 **S**
7	Your experienced in ECT room							
	a. One week	25	41.67	21	67.7	4	13.8	7.6
	b. Two week	25	41.67	14	45.2	11	37.9	df 2
	c. More than three week	10	16.66	4	12.9	6	20.7	**S**

N.S- Not significant at p>0.05 level S- Significant at P<0.05 level

Association between post test practice and selected demographic variables

S.No	Demographic variables	No	%	Level of practice				Chisquare test
				≤ Median (37)		> Median (23)		
				No	%	No	%	
1	Age							
	a. 19--20 years	31	51.67	24	77.4	7	24.1	7.13
	b. 21-- 22 years	16	26.67	8	25.8	8	27.6	df 2
	c. 23 and above years	13	21.66	5	16.1	8	27.6	***S***
2	Gender							
	a. Female	35	58.33	17	54.8	18	62.1	6.1
	b. Male	25	41.67	20	64.5	5	17.2	df 1 **S**
3	Religion							
	a. Hindu	22	36.67	15	48.4	7	24.1	0.98
	b. Muslim	10	16.66	5	16.1	5	17.2	df 2
	c. Christian	28	46.67	17	54.8	11	37.9	N.S
4	Attended any educational programme							
	a. Workshop	16	26.67	6	19.4	10	34.5	7.4
	b. Seminars/Conference	30	50.00	19	61.3	11	37.9	df 2
	c. No	14	23.33	12	38.7	2	6.9	**S**
5	Source of awareness of ECT							
	a. Television	12	20.00	8	25.8	4	13.8	0.86
	b. Literature	16	26.67	11	35.5	5	17.2	df 2
	c. Class attended	32	53.33	18	58.1	14	48.3	N.S
6	Type of hospital for practical experienced							
	a. Govt Mental Hospital	36	60.00	25	80.6	11	37.9	2.3
	b. Private/ Mission mental hospital	24	40.00	12	38.7	12	41.4	df 1 N.S
7	Your experienced in ECT room							
	a. One week	25	41.67	23	74.2	2	6.9	17.27
	b. Two week	25	41.67	11	35.5	14	48.3	df 2
	c. More than three week	10	16.66	3	9.7	7	24.1	**S**

N.S- Not significant at p>0.05 level S- Significant at P<0.05 level

IV. Discussion

The present study was under taken to assess the knowledge and practices of GNM 2nd year students regarding Electroconvulsive therapy in selected Nursing School , Tumkur. The result of the study was supported by

A cross sectional study was conducted to evaluate knowledge, experience & attitudes related to electroconvulsive therapy among patients & their relatives in Postgraduate Institute of Medical Education & Research, Chandigarh (2012). About a fifth of the patients (18%) had learnt from their own previous experience, while about a third of the relatives (35%) had learnt about ECT from others. Relatives were thus significantly

more likely than patients, to have acquired their facts from doctors, or other people (*P*<0.001). The media was a less common source for both patients (12%) and relatives (19%).A large member of patients (40-50, 52-65%) held positive attitudes on 7 of the 16 items. Accordingly (53-74, 69-96%) had clearly positive attitudes on 12 of the 16 items. But even among relatives, many (11-52, 14-68%) were unsure about several aspects of the treatment, though very few (0-5, 0-6%) expressed clearly negative views. Comparisons of patients from 2006 (n = 20) with those from 2007 and 2008 (n = 57) revealed significant differences on 27 of the total of 62 items. [17]

A Quazi-experimental study was conducted to measure knowledge and attitudes toward ECT among nurses and relatives in a Psychiatric hospital, Iran (2010) . In this study the pre and post test self – administered questionnaires were completed by 46 relatives and 46 nurses before and after education about ECT. Nurses in this research received a mean score of X = 34.97 knowledge before education and X = 39.78 after education (t = 2.02, p < 0.05), and a mean score of X = 33.41 attitude before education and, X = 42.82 after education (t = -14.25, p < 0.001). Relatives received a mean score of X = 23.41 knowledge before education and X = 30.15 after education (t = -12.44, p < 0.001), and a mean score of X = 33.39 attitude before education and, X = 41.13 after education (t = -9.10, p < 0.001). The differences between the 2 means among two groups were found to be statistically significant. Education given to nurses and relatives about ECT increased their knowledge of, and improved their attitudes toward ECT. [18]

V. Findings of the study

Level of knowledge of students regarding electroconvulsive therapy in the pre test shows that 88.33 % of the students were having inadequate knowledge on electroconvulsive therapy and 11.67% of the students are having moderate knowledge on electroconvulsive therapy.

Level of knowledge of students regarding electroconvulsive therapy in the post test shows that 63.33% of the students were having adequate knowledge on electroconvulsive therapy and 36.67% of the students are having moderate knowledge on electroconvulsive therapy.

Level of practice of students regarding electroconvulsive therapy in the pre test shows that 80.00 % of the students were having inadequate practice on electroconvulsive therapy and 20.00 % of the students are having moderate practice on electroconvulsive therapy.

Level of practice of students regarding electroconvulsive therapy in the post test shows that 61.67 % of the students were having adequate practice on electroconvulsive therapy and 38.33% of the students are having moderate practice on electroconvulsive therapy.

It is observed from the present study that the mean as well as the standard deviation of the knowledge on Electroconvulsive therapy during the pretest is 7.1and 3.4 and during the posttest it is 19.27 and 2.6. The difference in the mean knowledge score on Electroconvulsive therapy is statistically significant (<0.001)

It is observed from the present study that the mean as well as the standard deviation of the practice on Electroconvulsive therapy during the pretest is 5.7 and 1.97 and mean percentage is 38% and during the posttest it is 11.9 and 1.5 and mean percentage is 79.3%. The difference in the mean practice score on Electroconvulsive therapy is statistically significant (<0.001)

It is evident from the present pre test study that the Chi- Square value computed for the age, religion, Source of awareness of ECT with the level of knowledge is statistically significant which indicates that there is association between the knowledge score and the demographic variables in relation to the knowledge. Gender, attended any educational programme, Type of hospital for practical experienced and experienced in ECT room was found to be not significant.

It is evident from the present pre test study that the Chi- Square value computed for the gender, attended any educational programme with the level of practice is statistically significant which indicates that there is association between the practice score and the demographic variables in relation to the practice. Age, religion, Source of awareness of ECT, Type of hospital for practical experienced and experienced in ECT room was found to be not significant.

It is evident from the present post test study that the Chi- Square value computed for the age, Type of hospital for practical experienced with the level of knowledge is statistically significant which indicates that there is association between the knowledge score and the demographic variables in relation to the knowledge. Gender, religion, Attended any educational programme and Source of awareness of ECT was found to be not significant.

It is evident from the present pre test study that the Chi- Square value computed for the age, gender , Attended any educational programme, experienced in ECT room with the level of practice is statistically significant which indicates that there is association between the practice score and the demographic variables in relation to the practice. Religion, Source of awareness of ECT and Type of hospital for practical experienced was found to be not significant.

References

[1]. Scott AIF (ed) et al (2005), "The ECT hand book", 2nd edition, The 3rd report of the Royal College of Psychiatrist, Special committee on ECT, retrieved 2008-07-26.
[2]. Townsend C Mary, "Psychiatric Mental Health Nursing", 5th Edition, Jaypee Publishers, Page no. 314-15.
[3]. Malik Santosh and Anand Navneet, "Textbook of Psychiatric Nursing", 1st Edition, Lotus Publishers, Page no. 285
[4]. Mental Health, a report of the Surgeon general, Chapter 4, Retrieved 2007-12-29.
[5]. Read, J; Bentall, R (2010 Oct-Dec). "The effectiveness of electroconvulsive therapy: a literature review.". Epidemiologia e psichiatria sociale 19 (4): 333–47.
[6]. Bhatia M.S, "Short text book to Psychiatry", 6th Edition, CBS publishers,
[7]. Page no. 337-39.
[8]. Rush Gavin and Mc Carron Shane, "Patient attitude to Electro Copnvulsive Therapy", The Psychiatrist (2007), Issue 31, Page no. 212-24
[9]. Behrman Andy, "Electroboy", Fighting Depression and Bipolar Disorders.
[10]. Rajagopal R, Chakrabarti S, Grover S and Khehra N, " Knowledge, experience & attitudes concerning electroconvulsive therapy among patients & their relatives", Indian J Med Res (2012), Issue-135, Page No. 201-10
[11]. Kheiria M, Sahebalzamanib M, Jahantighc M, "The Study of Education Effect on Knowledge of, and Attitudes Toward Electroconvulsive Therapy Among Iranian Nurses and Patients' Relatives in a Psychiatric Hospital" Journal ECT (2010), Issue-17, Page no. 141-46

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