

Original Research Article

A Study To Assess The Perception And Anxiety Level Among The Family Members Of The Patients Undergoing Electro Convulsive Therapy In A Selected Hospital Of Berhampur, Ganjam, Odisha

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ABSTRACT

Mental disorders are leading contributor to the global disease burden. The global lifetime prevalence of mental disorders in adults is estimated to be between 12.2%-48.6%. To decrease the global public burden, electroconvulsive therapy is the treatment of choice. A descriptive study on *"A study to assess the perception and anxiety level among the family members of the patients undergoing electro convulsive therapy in a selected hospital of Berhampur, Ganjam, Odisha"*. was conducted among 80 family members of the patients undergoing ECT at the psychiatric indoor of M.K.C.G, M.C.H, Berhampur. A descriptive survey research design with survey approach was adopted. The objectives were to assess the perception and anxiety level of family members, to find out the association between perception and anxiety level with their selected demographic variables, to find out the correlation between perception with anxiety level of the family members. The samples were selected by using convenience sampling techniques. The data were collected through self-structured rating scales from 04.06.2018- 17.06.2018. The association of perception and anxiety level with their selected demographic variables were tested by using chi-square test. The reliability was tested by computing inter-rater method ($r=0.99, 0.98$). The collected data were analysed by using descriptive and inferential statistics.

Study finding revealed that, percentages wise distribution of family members of the patient undergoing ECT was 86.25%, 13.75% respectively and none of them ids having negative perception. According to anxiety scale, highest percentages (48.75%) of family members were having moderate anxiety level where as 46.25% of family members were having mild anxiety level and only 5% of family members were having severe anxiety level towards ECT.

There was no statistical significant association exist between the perception level with their selected demographic variables like age, gender, relationship with patient, educational status, occupation, family type, residence, previous source of information, per-capita income and previously attended number of ECT. The association between anxiety level with the selected demographic variables of family members shows that, there was no statistical significant association exists between the anxiety level with their selected demographic variables like age, gender, relationship with patient, educational status, occupation, family type, residence, previous

source of information and previously attended number of ECT. And a highly statistical significant association exists between the anxiety level with per-capita income of the family at the 0.05 level of significance.

As per the result of the study, there was moderately negative correlation exists between the perception and anxiety level of the family members of the patients undergoing electroconvulsive therapy at 0.05 level of significance.

Keywords: Electroconvulsive therapy, perception, anxiety level, family members of the patients undergoing ECT.

INTRODUCTION-

“I’m not my diagnosis. I have good days and bad days, but i’m not contagious. I’m just human.”
(Patrice caraway)

There is no health without mental health. It is as important as physical health. It includes our emotional, psychological, and social well-being which affects how we think, feel and act as we cope with life. It also helps to determine how we handle stress, relate to others, and make choices. 1 in 4 people in the world will be affected by mental or neurological disorders at some point in their lives. Around 450 million people currently suffer from such conditions, placing mental disorders among the leading causes of ill-health and disability worldwide.

OBJECTIVES

The objectives of the study were

1. To assess the perception and anxiety level of family members of mentally ill patients who receive ECT.
2. To find out the association between perception and anxiety level of family members of mentally ill patients with their selected demographic variables.
3. To find out the correlation between perception level with anxiety level of family members of mentally ill patients who receive ECT.

HYPOTHESIS-

H₁: There will be significant association exist between perception level with their selected demographic variables.

H₂: There will be significant association exist between anxiety level with their selected demographic variables.

METHODOLOGY-

RESEARCH APPROACH AND DESIGN-In this study, quantitative research approach and non-experimental descriptive research design was used.

VARIABLES- In the present study, attribute variables were personal characteristics which include age, gender, relationship with patient, educational status, occupation, family type, residence, previous source of information, per capita income and previously attended no of ECT with patients.

SETTING- The study was conducted at the psychiatric indoor of M.K.C.G., M.C.H, Berhampur, Dist- Ganjam, Odisha.

SAMPLE AND SAMPLE SIZE--In the present study the samples were family members of patients undergoing ECT, at the psychiatric indoor of M.K.C.G, M.C.H., Berhampur, Ganjam, Odisha and the sample size was comprised of 80 family members of the patients undergoing ECT and samples were selected by using convenient sampling technique.

DEVELOPMENT OF TOOL**Preparation of the tool**

Tools were prepared on the basis of objectives of the study. Two structured rating scales were prepared to collect data on perception and anxiety level among family members of the patients undergoing ECT.

The following steps were carried out in preparing the structured rating scale.

1. Extensive literature review
2. Development of the tool
3. Consultation with guide teacher/experts
4. Translation of the tool

DESCRIPTION OF TOOL

The tool is being divided into three parts.

Part-A

Socio-Demographics characteristics of family members consists of ten items which includes age, gender, relationship with the patient, education, occupation, family type, residence, previous source of information on ECT, monthly income of the family and previously attended number of ECT.

Part- B

It consists of a structured rating scale with 20 items to assess the perception of family members towards ECT. The items were prepared with options like disagree, I don't know, agree and answer carries a score of 1, 2 and 3 respectively. Identification of perception level was based on the percentage of the score obtained.

Table No-1 Scoring Process

Perception level	Actual Score	Percentage (%)
Negative perception	1-20	1.66-33.33 %
Uncertain perception	21-40	35- 66.66 %
Positive perception	41-60	68.33-100 %

Part-C

It consists of structured anxiety scale with 10 items to assess the anxiety level of the family members towards ECT with three options like absent, mildly present and severely present.

Table No-2 Scoring Process

Anxiety level	Actual Score	Percentage (%)
Mild anxiety level	10-16	33.33-53.33 %
Moderate anxiety level	17-23	56.66-76.66 %
Severe anxiety level	24-30	80-100 %

VALIDITY:

The content validity of the tool was established in consultation with guide and by nine experts experts in the field of Mental health nursing and statistics and their suggestions and opinions was taken to modify the tool.

Translation of the tool:

Initially the tool items were made in English. Then translated to Odia by expert and it was again retranslated into English by another expert to determine the correctness of Odia translation as per required information.

TRYOUT

The tool was administered to 10 family members of the patients undergoing ECT at psychiatric outdoor of MKCG, MCH, Berhampur. The purpose of the tryout was not to delete the items but to see if any language ambiguities existed.

RELIABILITY

To establish reliability, the tool was administered to 10 family members of the patients undergoing ECT, other than the study sample in the OPD of the psychiatric department of M.K.C.G, M.C.H, Berhampur, Ganjam. The inter rater/inter observer method was used to find out the reliability of the tool(perception scale and anxiety scale) and the reliability was ($r= 0.99, 0.98$), which shows that the rating scale was highly reliable.

ETHICAL CONSIDERATION

The study has been ethically approved by the research committee and from the concerned authority along with getting permission from the institution where the study was conducted and the topic was found feasible for the research study ..

PILOT STUDY

The pilot study was conducted among 20 family members of the patients undergoing ECT from 23rd April 2018 to 30th April 2018 at the OPD of the psychiatric department of M.K.C.G, M.C.H, Berhampur, Ganjam, Odisha. An administrative approval was obtained from the concerned authority to conduct the study.

The purpose of the pilot study is to

- Assess the perception and anxiety level among the family members of the patients undergoing ECT
- Find out the feasibility of conducting the final study and
- Determine the method of statistical analysis.

DATA COLLECTION PROCEDURE:**Permission from concerned authority-**

Prior to the data collection written permission was obtained from the superintendent of MKCG, MCH, Berhampur . Prior to data collection the informed consents were taken from the family members of the patients undergoing ECT. Selfintroduction was given to the family members and purpose of the study was explained to them.

Period of data collection -

The data was collected from date 04.06.2018 to 18.06.2018. During this period , the data was collected by investigator herself by using structured rating scales from the family members of the patients undergoing ECT, at the psychiatric outdoor of M.K.C.G, M.C.H, Berhampur to assess their perception and anxiety level towards ECT.

PLAN FOR DATA ANALYSIS – Collected data was edited to completeness, relevance and accuracy. Then data was organized, tabulated, analysed by using descriptive statistics such as frequency and percentage to assess the perception and anxiety level and inferential statistics include chi square (X^2) test was planned to find out the association between perception and anxiety level among family members of patients undergoing ECT with their selected demographic variables and Karl Pearson's formula used to find out the correlation between perception and anxiety level.

RESULTS**SECTION –A**

Description of demographic characteristics of the family members of the mentally ill patients undergoing ECT-

TABLE NO- 1

Sl no	Demographic variable	Sub-category	Total sample	
			Frequency	Percentage
1	Age	18-30 year	29	36.25
		31-42 years	15	18.75
		43 years and above	36	45
2	Gender	Male	46	57.5
		Female	34	42.5
3	Relationship with patient	Parents	32	40
		Spouse	19	23.75
		Sibling	21	26.25
		Children	8	10
4	Educational status	Primary	4	5
		Secondary	29	36.25
		Higher secondary	22	27.5
		Graduation and above	25	31.25
5	Occupation	Service	16	20
		Business	16	20
		Labourer/farmer	12	15
		Unemployed /Housewife	36	45
6	Family type	Nuclear	61	76.25
		Joint	17	21.25
		Extended	2	2.5
7	Residence	Rural	56	70
		Urban	24	30
8	Previous source of information on ECT	Media	14	17.5
		From friends	20	25
		From health care provider	39	48.75
		From family members	7	8.75
9	Per capita income	<1000	29	36.25
		1001-3000	26	32.5
		3001-5000	19	23.75
		>5001	6	7.5
10	Previously attended number of ECT with patient	0	5	6.25
		<4	59	73.75
		>4	16	20

SECTION-B:Assessment of perception level among the family members of the patients undergoing ECT.

TABLE-2-**N=80**

Perception level	Score	Frequency	Percentage (%)
Negative perception	0-20	0	0 %
Uncertain perception	21-40	11	13.75 %
Positive perception	41-60	69	86.25 %

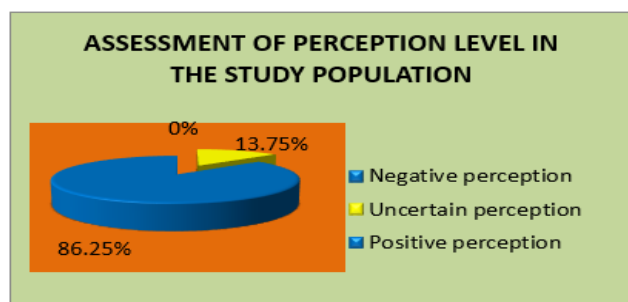


Figure-1: Pie diagram showing percentage wise distribution of family members of patients undergoing ECT according to their presence of perception level.

Percentage wise distribution of family members of patients undergoing ECT according to presence of perception assessed which shows that, highest percentage i.e 86.25 % of family members have positive perception towards ECT where as 13.75% of family members have uncertain perception towards ECT and 0% have negative perception towards ECT.

SECTION- C- Assessment of anxiety level among family members of patients undergoing ECT.

TABLE-3

N=80

Anxiety level	Score	Frequency	Percentage (%)
Mild anxiety level	10-16	37	46.25 %
Moderate anxiety level	17-23	39	48.75 %
Severe anxiety level	24-30	4	5 %

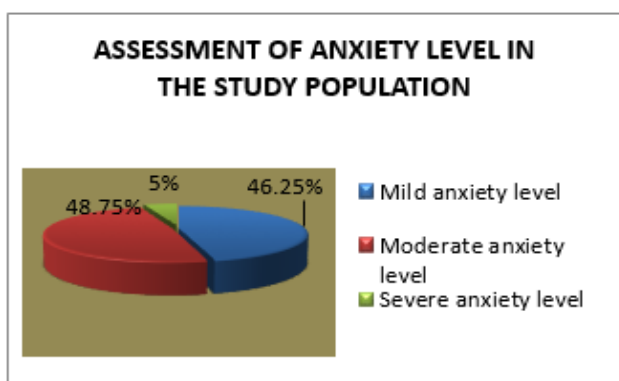


Figure-2 : Pie diagram showing percentage wise distribution of family members of patients undergoing ECT according to their anxiety level.

Percentage wise distribution of family members of patients undergoing ECT according to the presence of anxiety level which shows that, highest percentage i.e 48.75 % of family members have moderate anxiety level towards ECT where as 46.25% of family members have mild anxiety level towards ECT and only 5 % have severe anxiety level towards ECT.

SECTION-D : Association of perception level with their selected demographic variables.

TABLE-4

N=80

Sl. No	Name of demographic variables	Degree of freedom (df)	Calculated value	Table value (p)	Level of significance	Remarks
1	Age	1	0.466	3.84	0.05	NS
2	Gender	1	0.035	3.84	0.05	NS
3	Relationship with patient	1	0.148	3.84	0.05	NS
4	Educational status	1	0.91	3.84	0.05	NS
5	Occupation	1	1.323	3.84	0.05	NS
6	Family type	1	1.49	3.84	0.05	NS
7	Residence	1	0.23	3.84	0.05	NS
8	Previous source of information	1	0.027	3.84	0.05	NS
9	Per-capita income	1	0.671	3.84	0.05	NS
10	Previously attended number of ECT	1	3.187	3.84	0.05	NS

From the above table it was clear that, there was no significant association exist between perception level and selected demographic variables like age, gender, relationship with patient, educational status, occupation, family type, residence, previous source of information on ECT, per capita income and previously attended number of ECT etc. at 0.05 level of significance .Hence,

research hypothesis was rejected and null hypothesis was accepted as the “p” value is greater than “ χ^2 ” value.

SECTION- E : Association of anxiety level with their selected demographic variables.

H₂ : There will be significant association exist between anxiety level and their selected demographic variables

TABLE -5 Association between anxiety level of family members of mentally ill patients who receive electroconvulsive therapy with their selected demographic variables.

N=80

Sl. No	Name of demographic variables	Degree of freedom .df	Calculated value	Table value (p)	Level of significance	Remarks
1	Age	4	1.982	9.49	0.05	NS
2	Gender	2	1.919	5.99	0.05	NS
3	Relationship with patient	2	4.565	5.99	0.05	NS
4	Educational status	2	3.07	5.99	0.05	NS
5	Occupation	2	5.676	5.99	0.05	NS
6	Family type	2	1.46	5.99	0.05	NS
7	Residence	2	0.208	5.99	0.05	NS
8	Previous source of information	2	1.839	5.99	0.05	NS
9	Per-capita income	2	10.254	5.99	0.05	HS
10	Previously attended no of ECT	2	1.334	5.99	0.05	NS

From the above table, it was clear that, there was no significant association exist between anxiety level and demographic at 0.05 level of significance where as highly statistical significance exist between anxiety level and per-capita income of family members. Therefore research hypothesis was rejected and null hypothesis was accepted for variables like age, gender, relationship with patient, educational status, occupation, family type, residence, previous source of information on ECT and previously attended number of ECT as the “p” value is greater than the “ χ^2 ” value. And the research hypothesis was accepted for the variable per-capita income as the “p” value is less than the “ χ^2 ” value.

SECTION- F : Assessment of correlation between perception and anxiety level of family members towards ECT.

TABLE NO-6 Correlation between perception and anxiety level of family members towards ECT.

Variables	Mean	SD	r value	Table value	Level of significance
Perception level	46.2	5.261	- 0.203	0.232	0.05
Anxiety level	17.12	3.237			

Data revealed that, correlation value of perception level and anxiety level among family members of patients undergoing ECT was -0.203 which was significant at the level of 0.05.

DISCUSSION AND CONCLUSION-

A descriptive study with survey approach was conducted to assess perception and anxiety level among family members of mentally ill persons undergoing ECT in a selected hospital of Berhampur, Ganjam, Odisha. The data was collected from 80 family members of the mentally ill persons from psychiatric indoor of M.K.C.G, M.C.H, Berhampur. Convenient sampling technique was used to select the samples. The data was collected by using structured rating scale. Then the collected data are analyzed by using descriptive and inferential statistics and presented in the forms of tables and graphs.

A-Assessment of perception level among family members.

Percentage wise distribution of the family members of patients undergoing ECT according to the presence of perception assessed which shows that, highest percentage i.e 86.25 % of family members have positive perception towards ECT where as 13.75% of family members have uncertain perception towards ECT and no family members have negative perception towards ECT. The above finding was supported by a study conducted by **Szuba et al (2013)** to assess the perception of patient and family members perception towards ECT.

B-Assessment of anxiety level among family members

Percentage wise distribution of the family members of patients undergoing ECT according to the presence of anxiety level which shows that, highest percentage i.e 46.25 % of family members have mild anxiety level towards ECT where as 45% of family members have moderate anxiety level towards ECT and 8.75 % have severe anxiety level towards ECT.

C-Association of perception level with their selected demographic variables.(Hypothesis testing)

Association between perception level and their selected demographic variable reveals that, there was no significant association exist between perception level and selected demographic variables like age, gender, relationship with patient, educational status, occupation, family type, residence, previous source of information on ECT, per capita income and previously attended number of ECT etc. at 0.05 level of significance.

Hence research hypothesis was rejected and null hypothesis was selected as the “p” value is greater than the “ χ^2 ” value.

The above finding was supported by a study conducted by **Dipika Neupane, Sarmila Dhakal Sabita Thapa, Parash Bhandari and Shiva Raj Mishra (2013)** to assess perception of care givers towards ECT. This study concluded that , there was no association exists between care giver’s perception towards ECT with their selected demographic variables.

D-Association of anxiety level with their selected demographic variables.

Association between anxiety level and selected demographic variable reveals that, there was no significant association exist between the perception level and selected demographic variables at 0.05 level of significance where as highly statistical significance exists between anxiety level and per capita income. Hence the association which was found in respect to these demographic variables were a true association not by chance.

Therefore research hypothesis was rejected and null hypothesis was accepted for the variables like age, gender, relationship with patient, educational status, occupation, family type, residence, previous source of information on ECT and previously attended number of ECT as the “p” value is greater than the “ χ^2 ” value. And the research hypothesis was accepted for the variable per-capita income as the “p” value is less than the “ χ^2 ” value

E-Assessment of correlation coefficient between perception and anxiety level towards ECT.

For the assessment of correlation value between perception level and anxiety level among family members of mentally ill patients undergoing ECT was -0.203 which was significant at level of 0.05. From this it was inferred that, there was a moderately negative correlation exist between perception level and anxiety level of the family members of mentally ill patients undergoing ECT.

CONCLUSION

This study reports that, maximum family members having positive attitude towards ECT due to the information given to them by the health care members and they accepted it as a treatment of choice for mental illness. On looking into the anxiety level, highest percentage of family members

were having moderate anxiety level and it should be reduced by giving proper education and explaining the minimum side effects of ECT. The study also indicated that , there was no statistical significance exist between perception level and their selected demographic variables at 0.05 level of significance. There was no significant association exist between anxiety level and selected demographic variables like age, gender, relationship with patient, educational status, occupation, family type, residence, previous source of information on ECT and previously attended number of ECT etc. at 0.05 level of significance, where as highly statistical significance exist between anxiety level and per capita income. There was a moderately negative correlation exist between perception level and anxiety level of the family members of mentally ill patients undergoing ECT .

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