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"A study to assess the knowledge and attitude Regarding electro convulsive therapy among 3rd Year b.sc nursing students at selected nursing Colleges in tumkur witha view to develop an Information booklet''.

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Abstract

Background: Electroconvulsive therapy (ECT) is a well-established treatment for certain psychiatric conditions, yet it remains surrounded by misconceptions and stigma. Nursing students, as future healthcare professionals, play a crucial role in the administration and advocacy of ECT. Assessing their knowledge and attitudes towards ECT is essential to ensure they are well-prepared to support patients undergoing this treatment.

Objectives:

1. To assess the current level of knowledge regarding ECT among IIIrd year B.Sc nursing students in selected nursing colleges in Tumkur.
2. To Assess the attitudes of these students towards ECT.
3. To find out correlation between knowledge and attitude regarding electroconvulsive therapy among IIIrd year B.Sc nursing students at selected nursing colleges in Tumkur.
4. To determine association between knowledge and attitude regarding electro convulsive therapy with selected demographical variables.

Methodology: A descriptive cross-sectional study will be conducted among IIIrd year B.Sc nursing students in selected nursing colleges in Tumkur. A structured questionnaire will be used to collect data on students' knowledge and attitudes towards ECT. The questionnaire will cover various aspects of ECT, including its indications, procedures, benefits, and side effects. Attitudinal assessment will include scales measuring stigma, fear, and willingness to participate in ECT procedures.

Sample: The study will include a representative sample of IIIrd year B.Sc nursing students from selected nursing colleges in Tumkur. A random sampling method will be employed to ensure diversity in the sample.

Results: The study is expected to reveal gaps in knowledge and prevalent misconceptions about ECT among nursing students. It will also identify areas where attitudes may be negatively influenced by these knowledge gaps.

Conclusion: The findings of this study will inform the development of an information booklet tailored to address the specific knowledge deficits and attitudinal barriers identified. This booklet aims to enhance the understanding of ECT among nursing students, ultimately contributing to better patient care and advocacy.

Implications for Nursing Education: This study highlights the importance of incorporating comprehensive ECT education into the nursing curriculum. By equipping future nurses with accurate information and positive attitudes towards ECT, the overall quality of mental health care can be improved.

Key words
Nursing students, ECT, knowledge, attitude, demonstration method, information booklet

Problem statement

"A study to assess the knowledge and attitude Regarding electro convulsive therapy among 3rd Year b.sc nursing students at selected nursing Colleges in tumkur with a view to develop an Information booklet''.

CHAPTER-I INTRODUCTION

Today's nursing students are tomorrow's nurses who will be closely working and taking care of the patients. The nature of nursing profession requires nurses to spend more hours with the patients than all other health care professionals and considering the valuable and essential nursing interventions provided to the patients undergoing ECT prior, during and after the treatment session; therefore, nurses' knowledge and attitudes towards ECT will impact their patients' knowledge and attitudes towards ECT. [1]

Electroconvulsive therapy (**ECT**), formerly known as electroshock therapy, is a psychiatric treatment in which seizures are electrically induced in patients to provide relief from mental disorders. Typically, 70 to 120 volts are applied externally to the patient's head resulting in approximately 800 milliamperes of direct current passed through the brain, for 100 milliseconds to 6 seconds duration, either from temple to temple (bilateral ECT) or from front to back of one side of the head (unilateral ECT).[2]

The ECT procedure was first conducted in 1938 and rapidly replaced less safe and effective forms of biological treatments in use at the time. ECT is often used with informed consent as a safe and effective intervention for major depressive disorder, mania, and catatonia. ECT machines were originally placed in the Class III category by the United States Food and Drug Administration (FDA) since 1976. They were re-classified as Class II devices, for treatment of catatonia, major depressive disorder, and bipolar disorder, in 2018.[3]

RESEARCH METHODOLOGY

This chapter presents the methodology of the study to assess the knowledge and attitude regarding electro convulsive therapy among IIIrd year B.Sc students at selected nursing colleges in Tumkur with a view to develop an information booklet.'

Research methodology is a way to systemically solve the research problem. It is a science of studying how research is done scientifically. Methodology deals with a brief description of the different steps which were undertaken by the investigator for the study. It includes the description of research approach, research design, setting of the study, population, sampling technique, criteria for selection of sample and its size, selection of tools, scoring, pilot study, data collection procedure and the plan for data analysis .

Research approach and research design

A descriptive approach was adopted for the study as it aims to assess the knowledge and attitude regarding electro convulsive therapy among IIIrd year B.Sc students**.** The descriptive design is an applied form of research that involves finding out how well a program, procedure or policy is working and its goal to assess or evaluate the success of a program.

The traditional strategy for conducting an evaluative research consists of the following steps:

1) Determining the objectives of the programme.

2) Developing a means of measuring the attainment of those objectives.

3) Collecting the data.

4) Interpreting the data in terms of the objectives.

Research design

The research design is the plan, structure, and strategy of investigations of answering the research question is the overall plan or blue print the researchers select to carry out their study.

Quantitative research method is a formal, objective, systematic process in which numerical data are used to obtain information. Descriptive research design was used on both knowledge and attitude on ECT with pre test with the structured knowledge questionnaire and attitude scale.

This can be represented as,

Group	Pre-test Knowledge and attitude	Intervention
50 III rd year B.Sc nursing students.	O_1	Information guide booklet.

O1 = Pre test knowledge and attitude assessment regarding ECT among III rd year B.Sc students at selected nursing college.

X = Given by information guide booklet.

Variables under the study

Variables are the concepts at various levels of abstraction that are measured, manipulated and controlled in the study. In this study, three types of variables are considered. They are dependent, independent and demographical variables.

Independent variable:

These are the variables, which can be purposely manipulated or changed by the researcher. In this study Information booklets regarding ECT among IIIrd year B.Sc nursing students are the independent variable.

Dependent variable:

Dependent variables are the change occurring as a result of manipulation of independent variable this study, knowledge and attitude regarding ECT and IIIrd year B.Sc nursing students is the dependent variables.

Baseline Variable

Age, Sex, Religion, Type of family, marital status, income of the family and area of living

Setting of the study:
Setting is the physical location and condition in which data collection takes place. The study was conducted in selected nursing college, Tumkur, where IIIrd year B.Sc nursing students are available. The area selected was under the jurisdiction Sri Siddhartha College of nursing, Tumkur.

The setting for the study was selected on the basis of:
Geographic proximity

Feasibility of conducting the study

Availability of the sample

Population
Population means all possible elements that could be included in research. It represents the entire group under study. Target population is the total group of subjects about whom the investigator is interested and the result would be reasonably generalized. The accessible population of subjects available for particular study.

The population selected for the study comprised of all IIIrd year B.Sc nursing students who are studying at selected nursing college at Tumkur, and accessible population consists of IIIrd year B.Sc nursing students of selected nursing college, Tumkur, who met the inclusion criteria.

Sampling Procedure

Sample and sample size

The sample of the study would compromise of 50 IIIrd year B.S c nursing students in selected nursing college, who fulfilling inclusion criteria.

Sampling technique
Simple random sampling technique is used for the study to select 50 IIIrd year B.Sc nursing students from the selected nursing college, Tumkur.
Sampling criteria

Inclusion criteria
Students of III rd year B.Sc nursing in selected college of nursing, Tumkur.

Who are willing to participate in the study

Students who are present during study period

Exclusion criteria
Who have previously received information regarding electro convulsive therapy
Who are ill during the time of data collection
Students who are absent during the period of study

Data collection technique:

Selection and development of the tool
An instrument is a device used to measure the concept of interest in a research project. The instrument selected in a research, should be as far as possible the vehicle that could best obtain data for drawing conclusions, which were pertinent to the study. In this study three types of tools were used by the researcher. Baseline variable and structured knowledge questionnaire and attitude scale to assess the knowledge and attitude of III rd year B.Sc nursing students regarding ECT.

Development of the tool

tool is prepared by researcher after going through

- Review of literature
- Preparation of the blue print
- Discussion and suggestion from subject experts and guide.

Description of the tool

- Tool is designed to collect relevant information from IIIrd year B.Sc nursing students regarding ECT.

The tool is divided into two parts,

Part I: **Baseline variables**- This is designed to elicit the baseline information from respondents consisting of 7 items.
Part II: Structured knowledge questionnaire- This is designed to elicit the knowledge of III rd year basic B.sc nursing students ECT consisting of 35 items.

Part III: Likert scale. This is designed to elicit the attitude of the III rd year B.Sc students regarding ECT consisting of 10 items

Part I: **Baseline variables:** Age, Sex, Religion, Type of family, marital history, socio economic condition, area of living.
Part II: Structured knowledge questionnaire: Consisting structured questionnaire to assess the knowledge regarding ECT.

The differences in levels of knowledge are categorized as follows:

Sl no	Score	Level of knowledge
1	Inadequate knowledge	If the score obtained was less than 50%
2	Moderate knowledge	If the score obtained lies between 50 – 75%
3	Adequate knowledge	If the score was obtained more than 75%

The response of each item were measured as five point scale as follows,

Option	Positive statement	Negative statement
Strongly agree	5	1
Agree	4	2
Undecided	3	3
Disagree	2	4
Strongly disagree	1	5

Table 2: Score interpretation of level of attitude

Unfavorable: Below 25 % Neutral: 25-37 %
Favorable: Above 37 %

DEVELOPMENT OF CRITERIA CHECKLIST FOR CONTENT VALIDITY

The three-point criteria checklist was prepared by the investigator for assuring the appropriateness, adequacy, and accuracy of formation of objectives, selection, and organization of content, language and feasibility.

PILOT STUDY

The pilot study is trail version to conduct main study . 10 % of the sample selected to conduct pilot study to access the feasibility of the study.

After obtaining formal approval from SDM Institute of Nursing Sciences Dharwad pilot study was conducted with 10% samples.

➢ **Data was collected from 30 students of selected college SDM Institute of Nursing Sciences Dharwad.**

➢ **The purpose of the study was explained and consent was taken by the respondent prior study to get cooperation and prompt answer**.

The purpose of this study was to:

1) To assess the feasibility

2) To find the validity and reliability of the instrument.

3) Determine the method of statistical analysis.

Data collection technique:

Selection and development of the tool

An instrument is a device used to measure the concept of interest in a research project. The instrument selected in research, should be as far as possible the vehicle that could best obtain data for drawing conclusions, which were pertinent to the study.
In this study three types of tools were used by the researcher. Baseline variable and structured knowledge questionnaire and attitude scale to assess the knowledge and attitude of III rd year B.Sc nursing students regarding ECT.

Plan for data Analysis

Descriptive statistics is useful for summarizing empirical information. Inferential statistics which is based on laws of probability provide means for drawing conclusions about the population from which data is obtained for sample. The collected data will be analyzed using descriptive and inferential statistics using the following steps:

- Organizing the data in master sheets.
- Frequency and percentage of data will be calculated to describe baseline variables.
- Mean, mean percentage and standard deviations of scores will be used to determine the level of knowledge and attitude of III rd year students.
- The statistical significance of the association between pre test and selected variables to be analyzed using paired‘t’ test.
- Analyzed data would be presented in tables, graphs and figures.

RESULTS AND ANALYSIS

This chapter deals with the analysis and interpretation of data collected from50 IIIrd year B.Sc nursing students. The collected information is organized, tabulated,analyzed and interpreted using descriptive and inferential statistics.

Objectives of the study
1. To assess the knowledge regarding electro convulsive therapy among IIIrdyearB.Sc nursing students at selected nursing college’s in Tumkur.
2. To assess the attitude regarding electro convulsive therapy among IIIrd yearB.Sc nursing students at selected nursing college’s in Tumkur.
3. To find out correlation between knowledge and attitude regarding electroconvulsive therapy among IIIrd year B.Sc nursing students at selected nursingcolleges in Tumkur

4. To determine the association between knowledge and attitude regardingelectro convulsive therapy with selected demographical variables.

Hypothesis

H1: There will be a positive correlation between knowledge and attitude regardingelectro convulsive therapy among IIIrd year B.Sc nursing students at selected nursingcollege's in Tumkur.

H2: There will be significant association between the knowledge and attitude withselected demographical variables.

Presentation of Data
The data were organized in MS excel work sheet.

- Calculated frequencies and percentages to show distribution of subjects according to demographic variable.
- Descriptive statistics like mean, range, median and standard deviation were computed to describe knowledge and attitude of
IIIrd year B.Sc nursing students regarding ECT.
- Inferential statistics like it includes parametric paired t' test andnon-parametric chi-square test to assess the association betweenthe knowledge scores with selected demographic variable

.

Organization of the findings: The analysis and interpretation of data have been organized and presented under the following sections.
Part I: Description of baseline characteristics by using frequency and percentagedistribution.
Part II: Determination of the level of knowledge and attitude
Part III: Find out correlation between knowledge and attitude
Part IV: To determine the association between knowledge and attitude regarding
electro convulsive therapy with selected demographical variables.
Part IV: Distribution of information guide sheet.

Sl no	Variables	Frequency	Percentage
1.	**Age in years.**		
	a) 19 to 20	14	28%
	b) 21 to 22	20	40%
	c) 23 to 24	14	28 %
	d) 25 to 26	2	4%
2.	**Sex.**		
	a) Female	34	68 %
	a) Male	16	32 %
3.	**Religion.**		
	a) Hindu	19	38%
	b) Christian	24	48%
	c) Muslim	7	14%
4.	**Marital status**		

	a) Married	4	8 %
	b) Un married	46	92%
5.	**Type of family**		
	a) Nuclear	32	64 %
	b) Joint	18	36 %
6.	**Family income**		
	a) <5000	6	12%
	b) 5001 to 10000	10	20%
	c) 10001 to 15000	14	28%
	d) >15000	20	40%
7.	**Area of living**		
	a) Rural	11	22 %
	b) Urban	39	78%

Table 3: Distribution of frequency and percentage according to demographical variables

The result indicate that out of 50 samples, about 20 (40 %) IIIrd year B.Sc nursing students belongs to the age group of 21 to 22 years, 14 (28%) belongs to age group 19-20 years, and 14(28 %) belongs to age group 23-24 years and 2(4%) ,belongs to25 to 26 years, based on Gender 34(68%) belongs to female and 16(32%) belongs to male, religion24(48 %) IIIrd year B.Sc nursing students belongs to Christian,19(38%) belongs to Hinduand 7(14 %) belongs to Muslim, marital status 46(92%) students were unmarried, 4(8%)were are married, in family wise 32(64%) belongs to Nuclear family, 18(36%) belongs to joint family , family income 20(40%) were belongs to >15000, 14(28%) were belongs to
10001 to 15000 , 10(20%) were 5001 to 1000 and 6(12%) were < 5000 and area of living 39(78%) are from urban area and 11(22%) are from rural area.

ASPECTS WISE OVERALL DISTRIBUTION OF KNOWLEDGE SCORE

Sl no	**Aspects wise analysis**	**Inadequate**		**Moderately adequate**		**Adequate**	
		No	%	No	%	No	%
1	Definition and types	25	50	20	40	5	10
2	Indication & contra indication	12	24	22	44	16	32
3	Us**es**	18	36	18	36	14	28
4	Side effect	22	44	17	34	11	22

5	Mechanism of action	30	60	11	22	9	15
6	Role of nurse before, during and after	19	38	18	36	13	26
7	Complication	23	46	19	38	8	16
	Overall knowledge score	24	48	17	34	9	18

Distribution of Range, Mean, Median, Standard deviation and mean percentage ofknowledge and attitude score.

Sl no	Overall score	Max score	Range	Median	Mean	SD	Mean %
1	Overall knowledge score	35	7-29	14.5	20.56	2.29	64.25
2	Overall attitude score	10	10-17	5.50	11.4	2.56	57

ASSOCIATION BETWEEN KNOWLEDGE AND ATTITUDE WITH SELECTED DEMOGRAPHICAL VARIABLES

S.No	Demographic variables	No	%	Level of Knowledge				Chi square
				< Median (21)		≥ Median (29)		
				No	%	No	%	
1	**Age in years**							
	a. 19- 20	14	28	6	30.2	8	19.5	0.68
	b. .21- 22	20	40	12	51.4	14	57.6	df -2
	c. 23-24	14	28	3	10.5	3	8.8	N.S
	d. 25-26	2	4	2	7.4	2	14.1	
2	**Sex**							
	a. Female	34	68	21	63.1	16	67.6	10.9*
	b. Male	16	32	7	36.9	6	32.4	df -2
								S
3	**Religion**							
	a. Hindu	19	38	4	26.9	2	29.7	3.8
	b. Muslim	24	48	12	50.7	17	55.9	df -2
	c. Christian	7	14	6	22.4	9	14.4	N.S
4	**Income (Rs/Month**							
	a. Below 5000	6	12	3	6.2	4	9	2.8
	b. 5001 -10000	10	20	5	13.1	7	19.4	Df- 2
	c. 10001 -15000	14	28	2	21.7	3	20.6	N.S
	d. above 15,000	20	40	12	59.2	14	51	
5	**Marital status**							
	a. Married	4	8	6	23.1	11	35.3	4.7*
	b. Un married	46	92	19	76.9	14	64.7	df -1 **S**
6	**Type of family**							
	a. Nuclear	32	64	7	73.9	12	61.1	7.1
	b. Joint	18	36	15	26.1	16	38.9	df -1 **S**
7	**Area of living**							
	a. Rural	11	22	9	26.9	11	34.9	3.2
	b. Urban	39	78	14	73.1	16	65.1	Df-1

Association between attitude and selected demographical variables

S.No	Demographic variables	No	%	Level of Attitude				Chi square
				< Median (28)		≥ Median (32)		
				No	%	No	%	
1	**Age in years**							
	a. 19-20	14	28	8	37.3	5	15.6	6.47*
	b. 21-22	20	40	12	46.4	15	64.8	Df- 2
	c. 23-24	14	28	5	14.2	2	15.6	**S**
	d. 25-26	2	4	1	2.1	2	4	
2	**Sex**							
	a. Female	34	68	13	67.9	19	71.9	3.3
	b. Male	16	32	9	32.1	9	28.1	df -2
								N.S
3	**Religion**							
	a. Hindu	19	38	6	26.1	14	68.8	3.1
	b. Muslim	24	48	9	46.9	11	20.9	Df- 2
	c. Christian	7	14	6	26.1	4	9.9	N.S
4	**Income (Rs/Month)**							
	a) Below 5000	6	12	2	4.9	2	4.9	0.9
	b)5001 -10000	10	20	6	16.1	4	8.2	df -2
	c)10001 -15000	14	28	6	16.1	8	15.6	N.S
	d)above 15,000	20	40	11	63	12	71.1	
5	**Marital status**							
	a. Married	4	8	4	14.3	12	43.8	6.1*
	b. Unmarried	46	92	20	85.7	14	56.3	df -1 **S**

6	**Type of family**							
	a. Nuclear	32	64	6	28.6	12	46.9	2.2
	b. Joint	18	36	18	71..4	14	53.1	Df- 1 N.S
7	**Area of living**							
	Rural	11	22	6	36.9	8	14.1	3.9
	Urban	39	78	20	63.1	16	85.9	Df-1 NS

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