

A Study to Assess the Knowledge and Attitude Regarding the Electro Convulsive Therapy Among Caretaker of Psychiatric Patient in Selected Hospital Setting in, Bengaluru

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ABSTRACT

Background of the study: Knowledge and attitude towards ECT not only among the patient and their caretaker but also among the lay public, among adolescent patients and their parents, and also among health professionals including psychiatrists. Although no standard procedure for attitude assessment exists, most of these studies have utilized a questionnaire framed from the experience of clinicians. Concerns were frequently expressed, probably because ECT was not fully understood by the patients and their families. The authors of this study, too, noted from their clinical experience that patients and their caretaker had many misconceptions as well as a negative attitude towards the use of ECT. The aim of the study is “assess the knowledge and attitude regarding the electro convulsive therapy among caretaker of psychiatric patient.

Objectives of the study

- To assess existing knowledge regarding the electro convulsive therapy among caretaker of psychiatric patient, as measured by structured knowledge questionnaire.
- To assess existing attitude regarding the electro convulsive therapy among caretaker of psychiatric patient, as measured by structured knowledge questionnaire.
- To determine the association between knowledge scores with selected demographic variables.

Method: A descriptive approach with descriptive design was used for the study. The sample consisted of caretaker of psychiatric patient in selected hospital at Bangalore, selected by non-probability convenient sampling technique. Data was collected by structured knowledge questionnaire on electro convulsive therapy. After collecting demographic data, knowledge assessment was done structured knowledge questionnaire. The collected data was analyzed by using descriptive and inferential statistics.

Result: The overall mean percentage knowledge score on regarding electro convulsive therapy is found to be 48.94% with SD 2.45 among the respondents. Majority (53.23%) of the respondent have moderate knowledge on Complication of electro convulsive therapy, followed by 52.75% of Complication of electro convulsive therapy, 48.6% of Preparation for electro convulsive therapy, 43% of General information, 42.2% of Purpose of electro convulsive therapy, 39.8% Importance of electro convulsive therapy.

Interpretation and conclusion: The findings of the study showed that the knowledge of the caretaker of psychiatric patient in was not satisfactory. Educating the caretaker of psychiatric patient will help them

to improve the knowledge about electro convulsive therapy.

Keywords: Effectiveness; Descriptive; caretaker of psychiatric patient; electro convulsive therapy.

INTRODUCTION

“Fear is the natural reaction to moving closer to the truth”

-Pema Chodron

Electroconvulsive therapy (ECT), formerly known as electroshock, is a psychiatric treatment in which seizures are electrically induced in anesthetized patients for therapeutic effect. Its mode of action is unknown. Today, ECT is most often recommended for use as a treatment for severe depression that has not responded to other treatment, and is also used in the treatment of mania and catatonia. It was first introduced in 1938 by Italian neuropsychiatrists Ugo Cerletti and Lucio Bini, and gained widespread use as a form of treatment in the 1940s and 1950s. In the United Kingdom and Ireland, drug therapy is continued during ECT. About 70 percent of ECT patients are women, due to women being at twice the risk of depression. 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.¹

Electroconvulsive therapy (ECT) is used frequently in developing countries, but investigations of patient's awareness and perception of ECT are rare. The present study thus attempted a comprehensive examination of knowledge, experience and attitudes concerning ECT among patients treated with brief-pulse, bilateral, modified ECT, and their caretaker.¹

Although electroconvulsive therapy (ECT) is an effective, safe and widely practiced treatment, it has also been one of most controversial and misunderstood procedures. Unfortunately, in the ongoing debate about the merits and demerits of the treatment, the opinions of patients who have undergone ECT and their caretaker have rarely been sought. Clinicians and researchers have traditionally focused on aspects such as efficacy, side effects and mechanism of action. However, the realisation that mere clinical efficacy of ECT did not necessarily predict patients' perceptions or satisfaction with the treatment has eventually led to several investigations of the knowledge, attitudes and experience of the procedure among patients. Despite this, research on awareness and perceptions of ECT among its recipients and their families from developing countries is scarce. More recently, there has been growing public concern about ECT even in developing countries like India¹. Issues such as the need for the treatment and for unmodified ECT are being frequently debated. In such a climate, examination of the views of patients and caretaker about ECT could help in determining the role of this treatment more precisely. We therefore, undertook this study which attempted to comprehensively examine knowledge, attitude and experience regarding ECT, of patients who had undergone the treatment and their caretaker. **NEED**

FOR THE STUDY

Despite evidence that electroconvulsive therapy (ECT) is effective and safe, and leads to shorter and less costly inpatient treatment, it is rarely used as the first line of treatment and is generally reserved for older and resistant cases of depression and other psychiatric disorders. Certain factors such as social

stigma, inadequate undergraduate training, doubts about its efficacy and safety, ambivalence among psychiatrists and doubts about its being a cost-effective alternative to antidepressant treatment, might have limited the use of ECT in the management of depression. It has been reported that the use of ECT is not uniform throughout the United States. While examining various reasons of limited use of ECT, Salzman has commented that ECT failed to attract scientists to carry out research on ECT as compared to antidepressant treatment. Much of the content in this paragraph is USA-sensitive.³

Numerous studies have addressed the issue of knowledge and attitude towards ECT not only among the patient and their caretaker but also among the lay public, among adolescent patients and their parents, and also among health professionals including psychiatrists. Previous studies had taken up only those patients who had completed a course of ECT in past. A notable difference between the findings of western and Indian studies is that knowledge is quite satisfactory and the attitude is positive in Indian subjects. The present study was carried out to examine the knowledge and attitude towards ECT among patients and caretaker attending the psychiatric services in a major hospital in north India.⁴

Most patients in this study obtained their information about ECT from doctors, past experience or other recipients. This is not unusual among patients who have undergone ECT in countries where it is used frequently. Patients from countries with less frequent use are more likely to acquire their facts from the media¹⁹, and usually have more negative perceptions of ECT. Despite this, patients of this study were poorly informed about ECT. A majority of patients were unaware of anything more than the rudiments of the procedure; very few were familiar with most other aspects. These results mirror the dominant trend in literature, which suggests that patients who receive ECT often know little about what it exactly involves²¹. Some other studies from India had earlier reported that a high proportion of patients (>65%) had adequate knowledge of ECT. However, on closer scrutiny the proportion of patients with full understanding of the treatment, particularly about placement of electrodes, duration of stimulus or fits, side effects and indications, was actually much lower (6-17%) in these studies. Poor information about ECT could be partly due to ECT-induced memory impairment (present in about half of the patients of this study) or confounding effects of current mental state²¹. Alternatively, it could be due to inadequate information offered prior to ECT. Systematic review on this aspect has concluded that only about half of the patients are satisfied by amount of information they receive prior to ECT²². In this study, the proportion of patients who felt that they had not received sufficient information regarding ECT prior to treatment was higher than that reported in previous studies from India and other developing countries. Favorable opinions about patients' experience are quite common in literature.

However, fear of ECT and concern about side effects and dissatisfaction with consent procedures are also reported. In our study unawareness and discontentment with consent procedures as well as feelings of coercion, indicated deficiencies in the process of informed consent, similar to that reported earlier particularly from developing countries including India. Although, the realities of the situation may make for somewhat different norms and standards of consent in developing countries, such shortcomings of the consent process are of great concern. About half of the patients complained of memory impairment, which they found distressing. Memory impairment is usually the commonest side effect reported in virtually all studies of ECT recipients. Rates vary from 29 to 79 per cent of the patients, with persistent loss being reported by at least one-third of them. In this study about two-thirds of the patients felt that they had benefited from ECT and were willing to repeat it again. These results were similar to those of conventional research from clinical settings in developing as well as developed countries, which has shown that a majority of the patients perceive ECT to be helpful and most are willing to undergo the

treatment again²¹. But, despite rating ECT so high, many patients of this study often chose to remain ambivalent in their attitudes, although very few were frankly critical of the treatment. This ambivalence could be interpreted in several different ways. Disturbed mood state often leads to negative perceptions of ECT²⁷, but was unlikely to be a major factor in this study, since all patients were either euthymic or free from psychotic symptoms, when assessed. Attitudes are often not simple for or against decisions; instead these represent a complex trade-off between judgments of benefits and risks. Thus, as in this study, ambivalence might be the norm, rather than the exception. However, patients' reluctance to reveal their true attitudes to the doctors who treat them, has generated the maximum debate. This notion is further endorsed by several surveys of ECT undertaken by consumer-organizations (using methods different from clinical research), which either report much lower rates of perceived benefit, or more widespread criticism of ECT among respondents. One of the strengths of the study was inclusion of caretaker. Results in this regard were somewhat remarkable in that caretaker were much better off than patients in almost every respect.

Accordingly, they had better access to diverse sources of information, were more aware of several details concerning ECT, were more likely to be satisfied with different parts of the consent process including information offered prior to treatment, and less likely to perceive coercion. They found the experience of ECT much less disagreeable, reported greater benefit and willingness to accept the treatment again, and also were much more positive regarding ECT. Such a trend favouring caretaker has been a consistent finding among studies from developing countries^{8,17,24}, but has not usually been found in Western studies⁶. The fact that caretaker neither suffered from the ill effects of the illness, nor had to endure the experience of ECT or its adverse effects, might have contributed to their better awareness and more positive perceptions. The influence of other variables was uncertain, though caretaker with higher levels of education had more positive attitudes about ECT.

Perceptions and awareness regarding ECT among patients and their caretaker could have a significant impact on the outcome of the treatment. However, these have been rarely examined in the Indian context. But, despite rating ECT so high, many patients of this study often chose to remain ambivalent in their attitudes, although very few were frankly critical of the treatment. This ambivalence could be interpreted in several different ways. Disturbed mood state often leads to negative perceptions of ECT²⁷, but was unlikely to be a major factor in this study, since all patients were either euthymic or free from psychotic symptoms, when assessed. Attitudes are often not simple for or against decisions; instead these represent a complex trade-off between judgments of benefits and risks.⁵

Thus, as in this study, ambivalence might be the norm, rather than the exception. However, patients' reluctance to reveal their true attitudes to the doctors who treat them, has generated the maximum debate. This notion is further endorsed by several surveys of ECT undertaken by consumer-organizations (using methods different from clinical research), which either report much lower rates of perceived benefit, or more widespread criticism of ECT among respondents. One of the strengths of the study was inclusion of caretaker. The fact that caretaker neither suffered from the ill effects of the illness, nor had to endure the experience of ECT or its adverse effects, might have contributed to their better awareness and more positive perceptions. The influence of other variables was uncertain, though caretaker with higher levels of education had more positive attitudes about ECT.⁶

In reference to the above mentioned literature, the investigator realized the importance of knowledge assessment of the patient regarding the ECT will be important, it will help to gain the knowledge and prevent negative attitude about the ETC.

OBJECTIVES

Objectives provide the investigator with some clear criteria against which the proposed research method can be assessed. For the present study review of literature, discussion with experts, and personal experience of the investigator gave a basis for the selection of the problem.¹⁷

This chapter deals with statement of problem, objectives of the study and conceptual framework.

STATEMENT OF THE PROBLEM

“A STUDY TO ASSESS THE KNOWLEDGE AND ATTITUDE REGARDING THE ELECTRO CONVULSIVE THERAPY AMONG CARETAKER OF PSYCHIATRIC PATIENT IN SELECTED HOSPITAL SETTING IN, BENGALURU.”

OBJECTIVES OF THE STUDY

- To assess existing knowledge regarding the electro convulsive therapy among caretaker of psychiatric patient, as measured by structured knowledge questionnaire.
- To assess existing attitude regarding the electro convulsive therapy among caretaker of psychiatric patient, as measured by structured knowledge questionnaire.
- To determine the association between knowledge scores with selected demographic variables.

OPERATIONAL DEFINITIONS

1. **Assess:** It refers to a process of finding knowledge of the caretaker of psychiatric patient.
2. **Knowledge and Attitude:** In the present study it refers to the level of information of caretaker of psychiatric patient with regard to electro convulsive therapy is measured by their correct responses to knowledge items of the questionnaire.
3. **Electro convulsive therapy:** It refers to a one kind of therapeutic treatment given to the psychiatric patient.
4. **Caretaker of psychiatric patient:** It refers to a people who is taking care of psychiatric patient during time of treatment

ASSUMPTIONS

Caretaker of psychiatric patient may have some knowledge regarding electro convulsive therapy.

LIMITATIONS

- The study enrolled caretaker of psychiatric patient who were visited the hospital at the time of data collection.
- Caretaker of psychiatric patient who are willing to participate in the research.
- The study is limited to caretaker of psychiatric patient who knows kannada or English.

HYPOTHESIS

H₁ - There will be a significant association between mean knowledge scores of the caretaker of psychiatric patient with selected demographic variable such as religion, socio-economic status and educational level.

CONCEPTUAL FRAMEWORK

Conceptual frame work is a complex whole of interrelated concepts or abstracts that are assembled together in some rational scheme by virtue of their relevance to a common theme. A conceptual model provides for logical thinking, for systematic observation and interpretation of observed data. The model also gives direction for relevant questions on phenomena and points out solutions to practical problems as well as serves as a spring board for the generation of hypothesis to be used.

The study is based on Betty Pender's Health Promotion Model. Here he used

- Individual Characteristics & experiences,
- Behavior Specific cognition & effect,
- Behavioral Outcome

Individual Characteristics & experiences:

Personal factors: This includes demographic data like Age, Sex, Religion, Type of family, Occupation, Family monthly income, Education, Source of information

Prior related behavior: This includes previous knowledge on electro convulsive therapy method

Behavior Specific cognition & effect

Perceived benefits of action: This includes improvement in knowledge on electro convulsive therapy.

Perceived barriers to action

This includes

- Lack of awareness
- Lack of source of information regarding electro convulsive therapy

Perceived self efficiency: This includes self awareness regarding electro convulsive therapy

Interpersonal influences: This includes peer group, Friends, Health personals, Mass media.

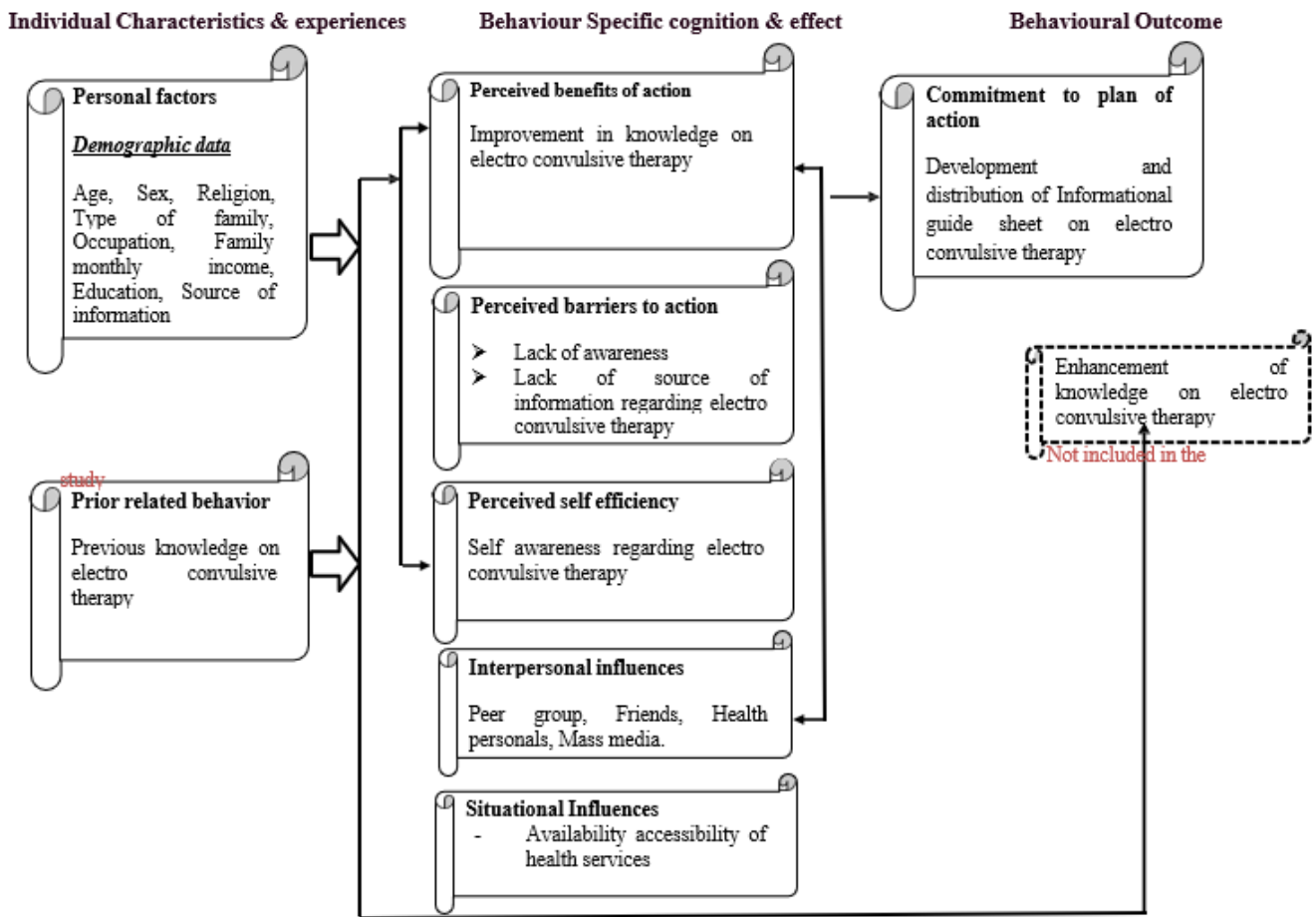
Situational Influences: This includes Availability accessibility of health services

Behavioral Outcome

Commitment to plan of action: This includes development and distribution of Informational guide sheet on electro convulsive therapy

Enhancement of knowledge on electro convulsive therapy, this step are not included in the study

Pender's Health Promotion Model



REVIEW OF LITERATURE

“Think about yourself in general including everything you are and everything you do and say which of the following overall evaluations best describes your feelings about yourself”.

(Walsh and Taylor, 1980).

Literature review refers to the activities involved in identifying and searching for information on a topic and developing an understanding of the state of knowledge on that topic.¹⁹

This chapter presents review of literature to the present study. A review is related to research and theory on topic has become a standard and virtually an essential activity of scientific research projects. Literature review is a critical summary of research on a topic of interest often prepared to put a research problem in content or as the basis for an implementation project.

Review of literature for the present study has been organized under the following headings.

1. Literature related to electroconvulsive therapy.
2. Literature related to knowledge and attitude of electroconvulsive therapy.

Literature related to electroconvulsive therapy

A study was conducted Factors that influence electroconvulsive therapy referrals: a statewide survey of psychiatrists. This study sought to identify factors associated with patient treatment referral for electroconvulsive therapy (ECT) by psychiatrists practicing in Virginia. Psychiatrists (N = 116) were surveyed regarding their knowledge about and attitudes toward ECT. Factors that prevented even those

physicians with favorable attitudes toward ECT from referring appropriate patients for ECT included patients' negative attitudes toward ECT, the logistics of arranging support and transportation, and financial constraints. Patient referral for ECT was associated with the treating physicians' and patients' knowledge and attitudes about ECT and with the presence of specific logistical barriers. Attention to these factors by treating physicians might enhance access to ECT treatment.⁸

A study was conducted a national survey of electroconvulsive therapy use in the Russian Federation. A survey of electroconvulsive therapy (ECT) throughout Russia was undertaken to understand the range of ECT usage and knowledge. A survey form was distributed by mail to 1648 Russian doctors and institutions expected to deal with ECT. A total of 114 replies were received. They indicated that ECT is available to 22.4% of the country's population. In available regions, ECT is given to 1.43% of hospital admissions and 0.54 per 10,000 persons per year. ECT is used in Russian psychiatry, neurology, and addictionology. Nevertheless, most respondents are enthusiastic and positive about ECT, and most institutions are eager to adopt modern ECT methods.⁹

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Literature related to knowledge and attitude of electroconvulsive therapy

A study was conducted reticence towards electroconvulsive therapy: a study of 120 caregivers in a teaching hospital in Tunisia. The method used are conducted a survey in the region of Sfax in Tunisia. It included 120 participants. The result found that concerning the items exploring theoretical knowledge, 67.5% of people were not able to answer, in conformity with the consensual scientific data, a minimum of 75% questions. The rates were significantly lower among the paramedics ($P < 0.001$) and those who work outside the psychiatric wards ($P = 0.003$). The answers of psychiatric caregivers were less frequently incorrect compared to those of non psychiatric ward workers. The latter more frequently thought that the psychiatrists easily resorted to ECT ($P = 0.003$)¹⁰.

A study was conducted patients' perceptions of the process of consenting to electroconvulsive therapy. The aim of the study is to explore patients' perceptions about how they consented to ECT. Twelve participants were interviewed about their experiences of consenting to ECT. Two participants consented to ECT as either a form of self-harm or hoping it would kill them. This concluded that Consenting to ECT is more complex than currently recognised and involves interpersonal and systemic factors. As a result, people may consent because they feel that they have little choice. Implications for practice are discussed.¹¹

A study was conducted perceptions and awareness of electroconvulsive therapy among patients and their families: a review of the research from developing countries. The objective of the study is although electroconvulsive therapy (ECT) is used frequently in many developing countries, investigations of

patients' awareness and perceptions of the treatment are rare. Fear of ECT was reported by a significant percentage (36%-75%). Distressing adverse effects were frequent; memory impairment (25%-95%) being the most common one. Despite these problems, most studies found that most patients perceived ECT to be helpful and had positive views about it. Simultaneously, a sizeable percentage (10%-32%) was quite critical of ECT. In contrast, caretaker of patients were invariably better aware, more satisfied with the experience, and had more favorable attitudes toward ECT.¹²

A study was conducted Patients' and their caretaker' knowledge of, experience with, attitude toward, and satisfaction with electroconvulsive therapy in Hong Kong, China. Although electroconvulsive therapy (ECT) is a safe and efficacious treatment, there is a widespread negative view of ECT in public and professional circles. There are no data on Chinese patients' knowledge of, experience with, attitude toward, and level of satisfaction with ECT in Hong Kong. The aims of this study were to examine patients' experience of ECT, and patients' and their caretaker' knowledge of, attitude toward, and level of satisfaction with ECT. To this effect, a prospective cross-sectional survey was conducted, involving 96 patients and their 87 caretaker. The study showed that the majority of patients believed they had not received adequate information about ECT. The most commonly reported side effect was memory impairment. Patients and caretaker had only limited knowledge of ECT, yet the majority of them were satisfied with the treatment and, having found it beneficial, maintained a positive attitude toward its use. The researchers concluded that Hong Kong Chinese patients and their caretaker accepted ECT as a treatment. The way information is provided to patients and caretaker when obtaining consent for ECT needs improvement.

A study was conducted electroconvulsive therapy: a review of knowledge, experience and attitudes of patients concerning the treatment. Despite its proven efficacy and safety, electroconvulsive therapy (ECT) has a negative image and attracts widespread public criticism. Simultaneously, a sizeable proportion was quite critical, although little was known about the extent and nature of such disapproval. Overall, the weight of the evidence supports the notion that patients undergoing ECT are well-disposed towards it. However, much needs to be done to improve the practice of ECT and to enhance patients' satisfaction with the experience of treatment.¹³

A study was conducted knowledge of and attitude toward electroconvulsive therapy: a survey of Hungarian anesthesiology residents. The method used is A self- administered questionnaire comprising 39 questions compiled by the authors. The result found 82 sophomore residents who completed the questionnaire, 29 have administered ECT. These residents were significantly more likely to consider ECT to be efficacious and less likely to be dangerous or lethal than the other residents ($P = 0.017$ and 0.004)¹⁴.

RESEARCH METHODOLOGY

Research methodology refers to control investigations of the ways of retaining, organizing and analyzing data. Methodological studies address the development, validation and evaluation of research tools and techniques.²⁹

In this chapter ,efforts are made to present the cruxes of the present research investigation that is research approach , research design , variables , setting of the study , population , sample , data collecting tool , content validity , pilot study, procedure of data collection , ethical consideration and plan for data analysis .

RESEARCH APPROACH

Research approach indicates the procedure for conducting the study. The research approach adopted for this study is descriptive research approach. Descriptive research approach helps to find the knowledge and attitude caretaker of psychiatric patient. For the present study descriptive approach was considered to be most suitable.³⁰

In order to achieve the objectives of the study, to find the knowledge and attitude regarding electro convulsive therapy among caretaker of psychiatric patient in a selected hospital.

The traditional strategy for the conduct of evaluative research consists of four broad phases.⁴¹

- Determining the objective of the program.
- Developing a means of measuring the attainment of those objectives.
- Collecting the data
- Interpreting the data in terms of the objectives

RESEARCH DESIGN

The research design refers to the over – all plans for obtaining answers to the research questions and for testing the research hypotheses. Polit and Hungler stated that the research design incorporates the most methodological decisions that a researcher makes in conducting a research study. The research design spells out the strategies that the researcher adopts to develop information that is accurate, objective and interpretable.³³

The design of a study comprises of the following aspects:

- The approach
- The methods of data collection and ethical considerations
- The time, place and source of data
- The method of data analysis

To achieve the aims and objectives of the study a descriptive study design was used without comparing with the control group.

Here in this study descriptive survey design is used as a research design in this study as there is a need to conduct generalized assessment of the regarding electro convulsive therapy among caretaker of psychiatric patient.

SETTING OF THE STUDY

The setting refers to the area where the study is conducted. The setting of this study was conducted at selected hospital. This setting was selected because of the availability of samples, feasibility of conducting the study and for ethical clearance.

POPULATION

Polit and Hungler (2004), referred population as the entire set of individuals or subjects having common characteristics, sometimes referred to as universe.³⁴

Population may be of two types, target population and accessible population. In this study two populations were described.

Target population:

The target population refers to the population that the researcher wishes to study and to make generalization on his research.⁴³ In this study the target population was the caretaker of psychiatric

patient.

Accessible population:

It refers to the aggregate of cases which is accessible to the researcher for conducting the study.⁴³ In this research the accessible population was the caretaker of psychiatric patient in selected hospital Bangalore.

SAMPLE

A sample is composed of some fraction or part of the total number of elements or units in a defined population sampling. Therefore, is a method of selecting some fraction of a population. Sample consists of the subset of the population selected to participate in the research study.³⁷

Sample Size

Sample size for the present study was 80 caretaker of psychiatric patient in selected hospital Bangalore.

Sampling Criteria

In sampling criteria the researcher specifies the characteristics of the population under the study by detailing the inclusion and exclusion criteria.³⁸

INCLUSION CRITERIA:

The characteristic that each sample elements must possess to be included in the sample.⁴⁴

It includes:

- Caretaker of psychiatric patient in selected hospitals, Bengaluru.
- Caretaker of psychiatric patient who are willing to participate in the study.
- Caretaker of psychiatric patient who are available during the period of collecting data.
- Caretaker of psychiatric patient who are able to read and write English or Kannada.

EXCLUSION CRITERIA:

The characteristics that could confound the result of the study such participants are excluded from the study.³⁹

It includes

- Caretaker of psychiatric patient who are sick at the time of data collection.
- Caretaker of psychiatric patient those who underwent similar type of intervention recently.

SAMPLING TECHNIQUE

Sampling defines the process of selecting a group of other elements with which to conduct a study.³⁷

In the present study Non-probability Convenient sampling technique was adopted for caretaker of psychiatric patient in a selected hospital at Bangalore

VARIABLES

A variable is a measurable component of an object or event that may fluctuate in quantity or quality from one individual, objects or event to another individual of the some general class.³⁷

Dependent variables:

The dependent variable is that phenomenon in the hypothesis, is not manipulated by the investigator but accepted as it occurs. It also called the effect, the response, the criterion measure, behavior or outcome that is researcher wishes to predict, study and explain.³⁷In this study the dependant variable was

knowledge of caretaker of psychiatric patient regarding electro convulsive therapy. Which will be tested among caretaker of psychiatric patient.

Associated variable:

It refers to those variables which have high influence on the dependent variable;⁴⁵ such as Age, education, religion, occupation, monthly income, type of family, and sources of information among caretaker of psychiatric patient.

DEVELOPMENT OF THE TOOL:

The tool or instrument is the written device that a researcher uses to collect data based on research problem and objectives of the study the following steps were undertaken to select and develop the data collection tool.³⁷

Selection of the tool:

A structured interview schedule selected on the basis of the objectives of the study, a structured questionnaire was prepared based on the review of literature and in consultation with experts in the field of Psychiatric Nursing, Statistics, English and Kannada, as it was considered to be the most appropriate instrument to elicit responses from the participants.

Development of tool:

A structured questionnaire was prepared to assess the level of knowledge on electro convulsive therapy among caretaker of psychiatric patient.

Description of the tool:

The researcher developed a structured questionnaire, which consisted of following aspects.

Section I:

This section consists of 8 items related to socio – demographic data which included variables like Age, education, religion, occupation, monthly income, type of family, and sources of information among caretaker of psychiatric patient.

Section II:

Structured questionnaire regarding selected aspects of which includes 32 items. The contents covered

Section III:

Check list for assessment of attitude of the caretaker of psychiatric patient regarding the electro convulsive therapy.

Validity of the tool:

Validity refers to the degree to which the process is measuring or evaluating a thing which is intended to measure or evaluate.⁴⁶

The content validity of the tool was ascertained in consultation with experts in the field of Psychiatric Nursing, Statistics, English and Kannada.

The experts were requested to give their opinion regarding relevance, appropriateness and degree of agreement in each item in the tool. Suggestions and recommendations given by the experts were accepted and necessary corrections were done in the final tool.

Reliability of the tool:

Reliability is defined as the extent to which instrument yields the same results on repeated measures. Split-half method is a method for estimating internal consistency by correlating the scores on half of the instrument with scores on the other half.⁴⁶

To establish reliability, the tool was administered, other than the study sample. split-half method was used to test the reliability of the tool. The tool was first divided into two equivalent halves and correlation of the half test was found using Karl Pearson's correlation coefficient formula ($r = 0.98$). There was significant correlation between the scores. The reliability coefficient of the whole test was then established by Spearman–Brown Prophecy formula ($r=0.98P<0.05$). The tool was found reliable.

Pilot study:

A Pilot study is a small scale version or trial run, done in preparation for the major study. It is designed to acquaint the researcher with the problems to be encountered in preparation for the larger project. It also provides the researcher to try out the procedure for collecting the data. The function of pilot study is to obtain information for improving the project or assessing its feasibility.⁴⁷

The pilot study was conducted to the caretaker of psychiatric patient. The formal permission was obtained from the Superintendent to conduct the pilot study, 10 caretaker of psychiatric patient were selected by non-probability purposive sampling technique.

The subjects selected for the pilot study possessed the same characteristics of the samples of main study in order to maintain homogeneity. The consent was taken by explaining the purpose of the study.

To find out the knowledge of the caretaker of psychiatric patient as per the objectives of the study, the pilot study was conducted. The completed questionnaire was collected back by the investigator after an average time of 1.30hrs to 2 hours.

The collected data was then analyzed by descriptive and inferential statistics. The difference obtained was found to be significant ($r = 0.94$).

The purpose of the pilot study was to find out the feasibility of the study, clarity of languages in the tools. After conducting the pilot study, it was found that the study was feasible, the questionnaire were relevant and time and cost of the study were within the limits.

Data collection procedure:

The investigator introduced himself and explained the purpose of data collection to the caretaker of psychiatric patient in order to obtain maximum cooperation from them and their willingness to participate in the study was ascertained. The respondents were assured the anonymity and confidentiality of the information provided by them.

Data was collected from 3.11.2013 to 19.11.2013. Subjects were selected according to the selection criteria of the study. On the first to assess the knowledge of caretaker of psychiatric patient, a structured knowledge questionnaire and attitude question in Kannada was given and collected the data, to evaluate the knowledge and attitude after the data was collected.

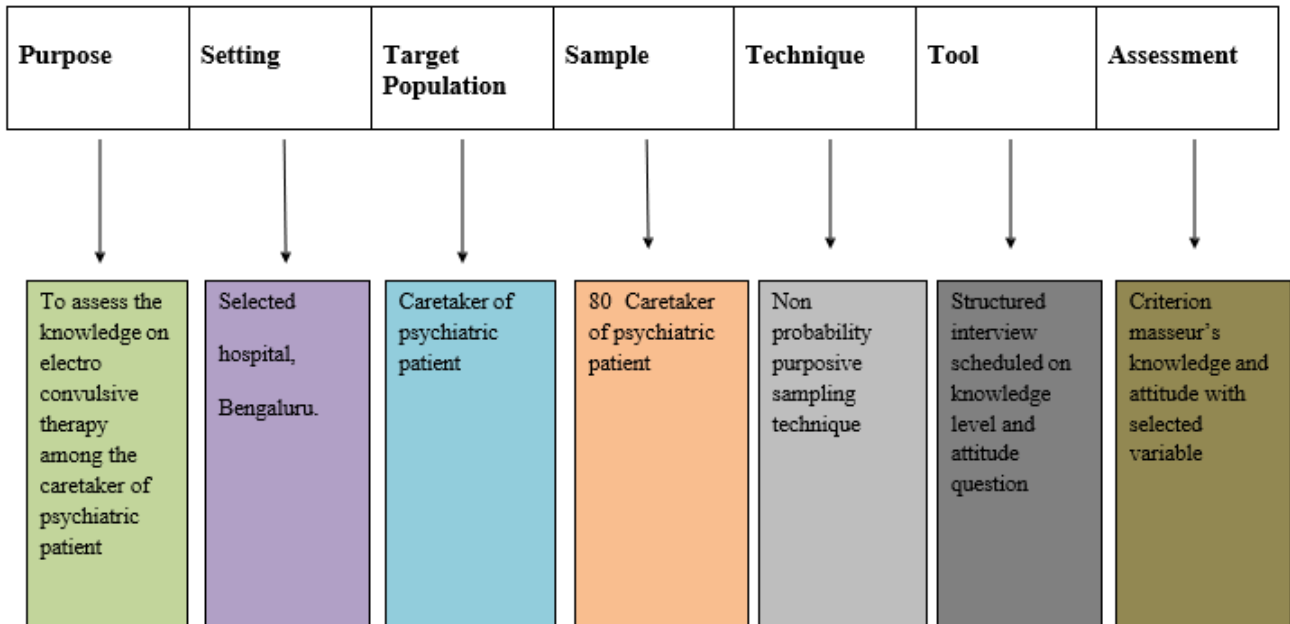
Plan for data analysis:

The collected data will be planned and analyzed in the form of descriptive and inferential statistics. The analyzed will be presented in the form of tables and figures by using mean, percentage, standard deviation, chi-square test.

The data will be analyzed as follows:

- Data on socio - demographic factors of caretaker of psychiatric patient.
- Data on knowledge level among caretaker of psychiatric patient.
- Data on association between Pre-test knowledge scores and selected socio- demographic variables.

Figure: Schematic Representation of Research Design



RESULTS

Analysis and interpretation of data

This chapter deals with the analysis of the data collected. The term analysis refers to the process of organizing and synthesizing data so as to answer research questions and test hypothesis. Statistical procedures enable the investigator to reduce, summarize, organize evaluate, interpret and communicate the numerical information. The data collected are interpreted in the following manner.

Objectives of the study

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Hypothesis of the study

H1 - There will be a significant association between mean knowledge scores of the caretaker of psychiatric patient with selected demographic variable such as religion, socio-economic status and educational level.

Organization of data analysis

The analyzed data has been organized and presented in the following sections:

Section: 1 Description of demographic variable of caretaker of psychiatric patient.

Section: 2 Assessment of knowledge on electro convulsive therapy and Mean, Standard deviation, Mean % of the knowledge on electro convulsive therapy.

Section: 3 Assessment of attitude on electro convulsive therapy and Mean, Standard deviation, Mean % of the knowledge on electro convulsive therapy.

Section: 4 Association between demographic variables and knowledge scores on electro convulsive therapy.

Section: 1

Table: 1 Frequency and percentage distribution according to age N=80

SL.NO	Age	Frequency	Percentage
1.	Below 20 years	15	18.75%
2.	21- 30 years	20	25%
3.	31- 50 years	30	37%
4.	51 years and above	15	18.75%
TOTAL		80	100%

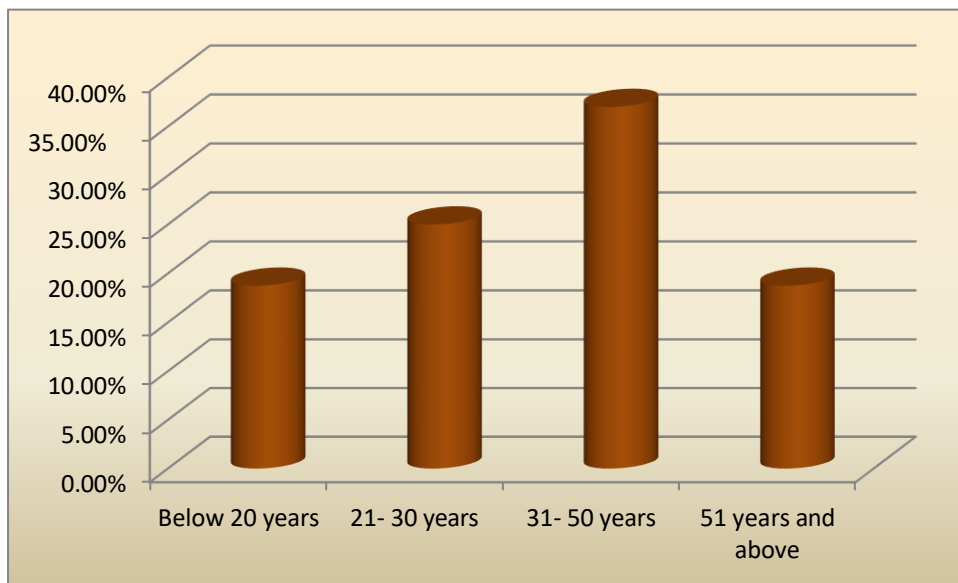


FIG: DISTRIBUTION OF RESPONDENT BY AGE

The above table and Cylindrical diagram shows that majority (37%) of the respondents were belongs to the age group of 3-5years, 25% were belongs to the age group of 2-3years and 18.75% were belonged to the both age group below 1 years and 5 years and above respectably.

Table: 2 Frequency and percentage distribution according to Education N=80

SL.NO	Education	Frequency	Percentage
1.	Illiterate	21	22%
2.	Primary school	15	18.75%
3.	High school	19	24%
4.	PU and above	25	28%
TOTAL		80	100%

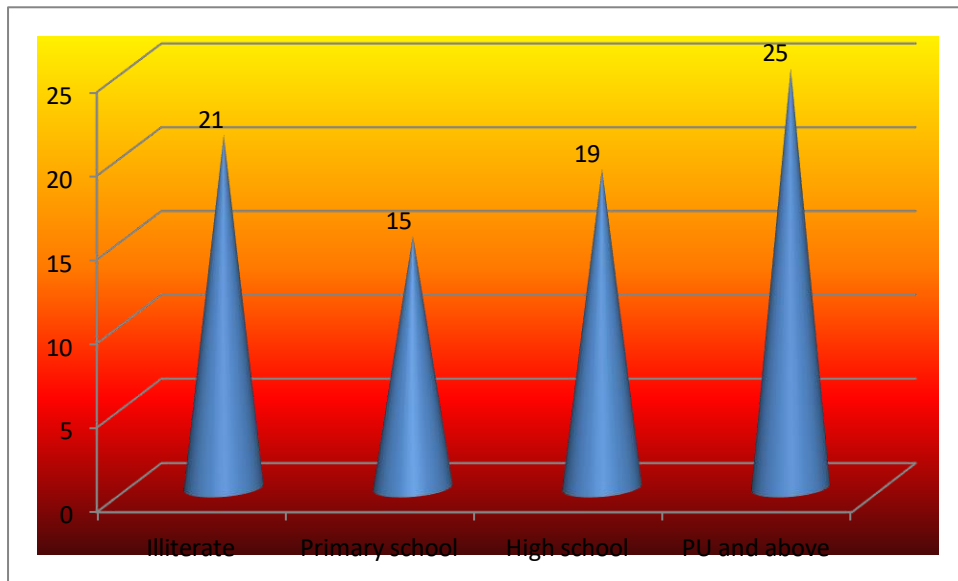


FIG: DISTRIBUTION OF RESPONDENT BY EDUCATION

The above table and Cone diagram shows that majority (25%) of the respondents were studied up to PU and above, 21% were illiterate, 19% were studied up to high school and remaining 15% were studied up to primary school.

Table: 3 Frequency and percentage distribution according to occupation N=80

SL.NO	Occupation	Frequency	Percentage
1.	Coolie	30	27.75%
2.	Govt. employee	15	18.75%
3.	Private employee	20	25%
4.	Others	15	18.75%
TOTAL		80	100%

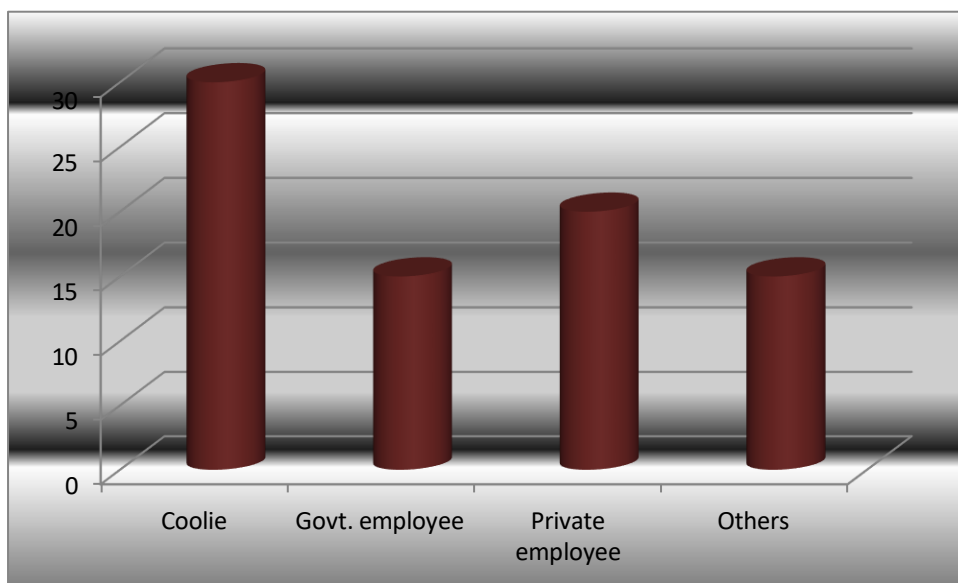


FIG: DISTRIBUTION OF RESPONDENT BY OCCUPATION

The above table and Cylindrical diagram shows that majority (27.75%) of the respondents was Coolie, 25% were Private employee, 18% were both others and Govt. employee.

Table: 4 Frequency and percentage distribution according to religion N=80

SL.NO	Religion	Frequency	Percentage
1.	Hindu	49	61%
2.	Muslim	14	17.5%
3.	Chastain	15	18.75%
4.	Others	2	2.5%
TOTAL		80	100%

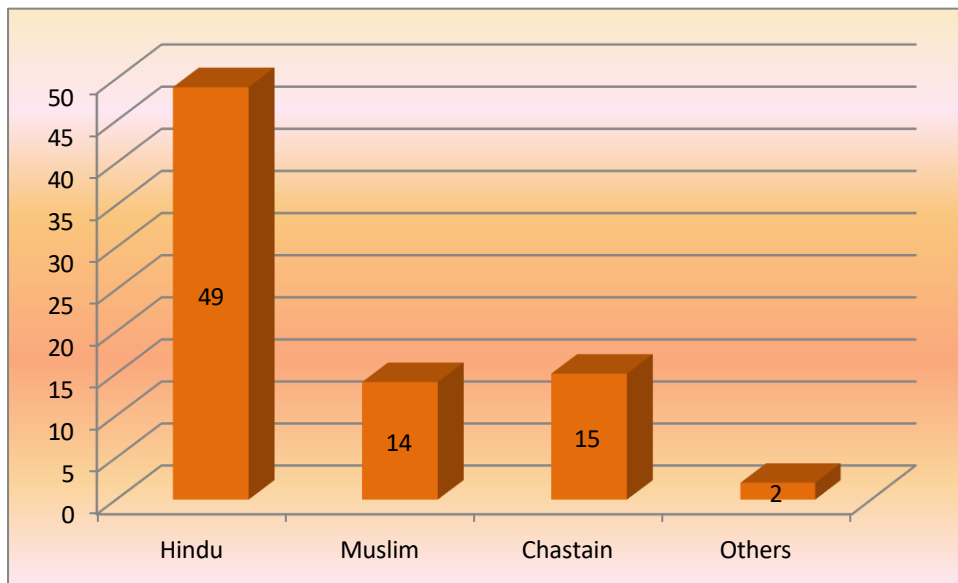


FIG: DISTRIBUTION OF RESPONDENT BY RELIGION

The above table and Bar diagram shows that majority (61%) of the respondents was Hindus, 17.5% were Muslims, 18.75% were Chastain and 2.5% were others.

Table: 5 Frequency and percentage distribution according to family type N=80

SL.NO	Family type	Frequency	Percentage
1.	Nuclear family	42	52.5%
2.	Joint family	28	35%
3.	Extended family	10	12.5%
TOTAL		80	100%

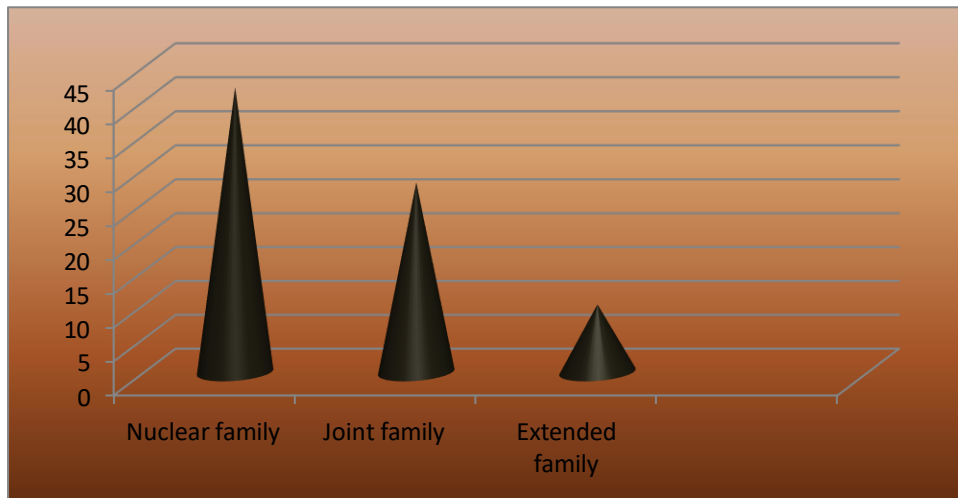


FIG: DISTRIBUTION OF RESPONDENT BY FAMILY TYPE

The above table and Cone diagram shows that majority(47.5%) of the respondents were joint family, 43.75% were nuclear family, 16.25% were single family and only 5% were extended family.

Table: 6 Frequency and percentage distribution according to Income per month N=80

SL.NO	Income per month	Frequency	Percentage
1.	Below 1000	16	20%
2.	Rs. 1001-2000	26	32.5%
3.	Rs. 2001-3001	15	18.75%
4.	Rs. 3001 & above	23	28.75%
TOTAL		80	100%



FIG: DISTRIBUTION OF RESPONDENT BY INCOME PER MONTH

The above table and Bar diagram shows that majority(32.5%) of the respondents were belongs to income group 1001 – 2000/ month, 28.75% were belonged to below 1000/ per month, 20% were belonged to the income group of 3001 and above and remaining 28.75% were belonged to income group of 2001-3000/month.

Table: 7 Frequency and percentage distribution according to Source of information N=80

SL.NO	Source of information	Frequency	Percentage
1.	Health personals	45	56.25%
2.	Mass media	18	22.5%
3.	Neighbors & caretaker	17	22%
4.	Others	00	0
TOTAL		80	100%

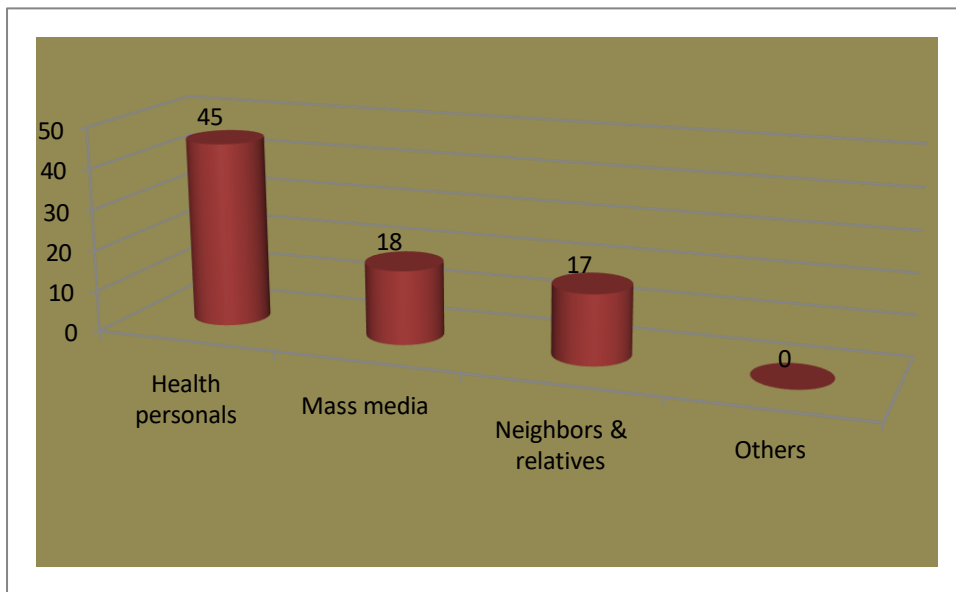


FIG: DISTRIBUTION OF RESPONDENT BY SOURCE OF INFORMATION

The above table and Cylindrical diagram shows that majority (56.25%) of the respondents were got information from health personals, 18% were from Neighbors & caretaker and 17% from mass media.

SECTON 2

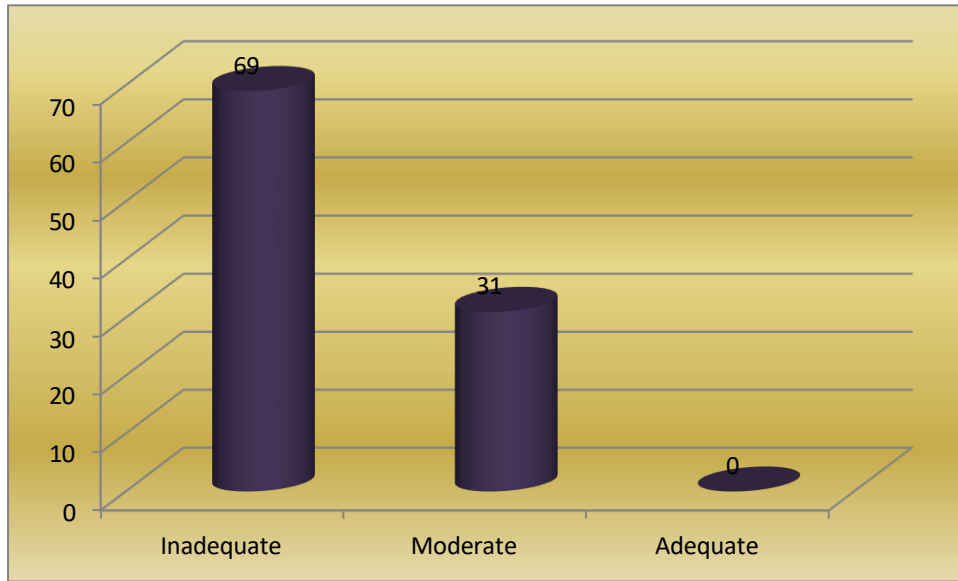
Assessment of knowledge on electro convulsive therapy among the caretaker of psychiatric patient.

Table. 8

Level of knowledge	Score	No of Respondent	
		No	%
Inadequate	<50%	69	86.25
Moderate	50-70%	31	38.75

Adequate	>70%	0	0
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FIG: Assessment of knowledge on electro convulsive therapy among the caretaker of psychiatric patient.



The above table and Cylindrical diagram shows that majority(86.25%) of the respondents were have inadequate knowledge, 38.75% have moderate knowledge and none of the caretaker have adequate knowledge on electro convulsive therapy.

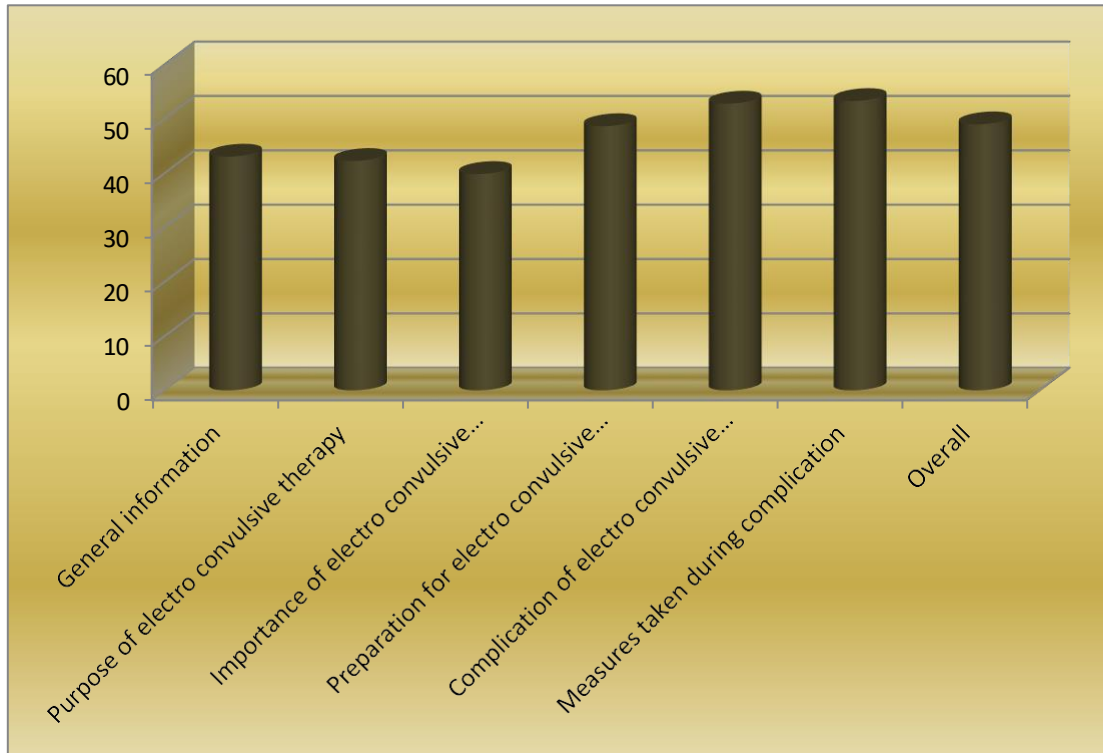
SECTION 3

Table.9 Mean, Standard deviation, Mean % of the knowledge on electro convulsive therapy among the caretaker of psychiatric patient.

Aspects wise knowledge	Max Statements	Max Score	Range	Mean	SD	Mean%
General information	2	2	0—2	1.22	0.72	43
Purpose of electro convulsive therapy	5	5	0—3	2.33	1.18	42.2
Importance of electro convulsive therapy	3	3	0—3	1.36	0.7	39.8
Preparation for electro convulsive therapy	5	5	0—3	3.63	1.13	48.6
Complication of electro convulsive	4	4	0—2	1.22	0.32	52.75

therapy						
Measures taken during complication	9	9	0—5	1.72	0.67	53.23
Overall	32	32	10—20	15.31	2.45	48.94

FIG: Mean, Standard deviation, Mean % of the knowledge on electro convulsive therapy



The above table and the cylindrical diagram show aspects wise means knowledge score on electro convulsive therapy.

The overall mean percentage knowledge score on regarding electro convulsive therapy is found to be 48.94% with SD 2.45 among the respondents. Majority (53.23%) of the respondent have moderate knowledge on Complication of electro convulsive therapy, followed by 52.75% of Complication of electro convulsive therapy, 48.6% of Preparation for electro convulsive therapy, 43% of General information, 42.2% of Purpose of electro convulsive therapy, 39.8% Importance of electro convulsive therapy.

Section 4

TABLE 10: ASSESSMENT OF ATTITUDE SCORE

	No. of questions	n – Max score	r of psychiatric patient	
			Mean ±SD score	%
Attitude (Positive)	13	0 -65	45.88±4.88	70.6%

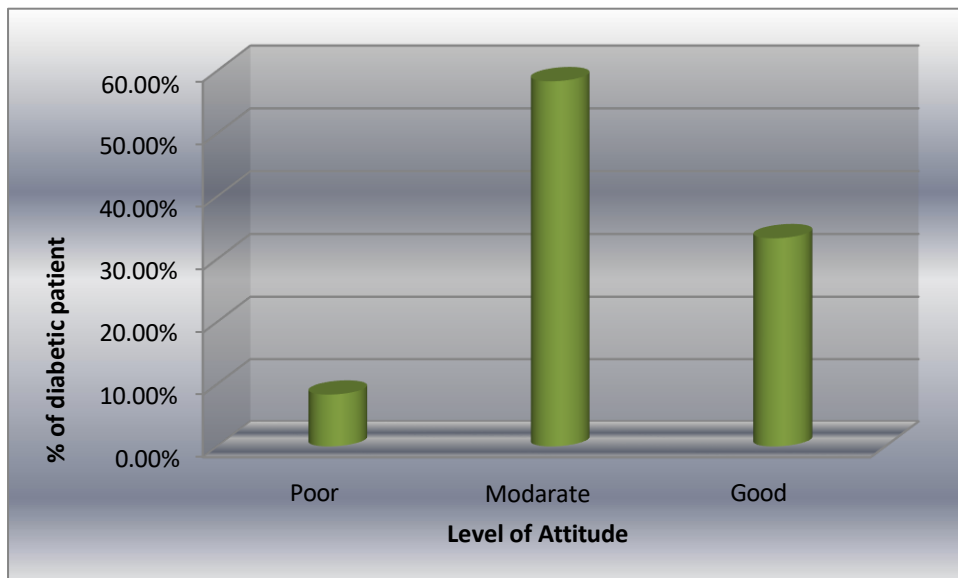
Attitude (Negative)	7	0 -35	19.72±3.95	56.3%
OVERALL	20	0 -100	65.60±9.08	65.6%

The above table shows that overall attitude of the Caretaker of psychiatric patient 65.6% and in that 56.3% are negative attitude and 70.6% are positive attitude regarding the electro convulsive therapy.

TABLE 11: LEVEL OF ATTITUDE SCORE

Level of Attitude	Caretaker of psychiatric patient	
	N	%
Poor	5	8.33%
Moderate	35	58.33%
Good	20	33.33%
Total	60	100.0%

LEVEL OF ATTITUDE SCORE



Bar diagram shows percentage of level of attitude of caretaker of psychiatric patient.

The above table shows that 58.33% electro convulsive therapy having moderate lave of attitude, 33.33% of electro convulsive therapy having good attitude and 8.33% of electro convulsive therapy having poor attitude regarding the foot care.

Section 5

Association between demographic variables and knowledge scores on electro convulsive therapy among caretaker of psychiatric patient

Table. 10 Association between demographic variables and knowledge scores on electro convulsive therapy among caretaker of psychiatric patient

S.No	Demographic variables	No	Knowledge Scores				Chi-square
			< Median		>Median		
			No	%	No	%	
1	Age						
	Below 20 years	15	14	35.90	7	13.11	13.12*
	21- 30 years	20	12	3.70	12	18.03	Df3
	31- 50 years	30	9	20.51	28	35	S
	51 years and above	15	4	12.82	14	24.59	
2	Education of the mother						
	Illiterate	21	12	38.46	9	18.03	5.4*
	Primary school	15	9	25.64	8	16.39	Df3
	High school	19	7	20.51	12	26.23	NS
	Secondary school and above	25	4	15.38	22	39.34	
3	Occupation						
	Coolie	30	6	20.51	24	44.98	8.12*
	Govt. employee	15	3	12.82	13	24.59	Df3
	Private employee	20	12	35.90	9	18.03	NS
	Others	15	10	30.08	6	13.11	
4	Religion						
	Hindu	49	16	46.15	34	59.02	
	Muslim	14	9	28.21	11	21.31	9.33
	Chastain	15	6	20.51	8	19.67	Df3
	Others	2	1	5.13	0	0.00	S
5	Family type						
	Nuclear family	42	14	38.46	10	18.03	10.9*
	Joint family	28	4	15.38	21	39.34	Df3
	Extended family	10	9	25.64	7	16.39	S
6	Income per month						
	Below 1000	16	2	7.69	21	37.70	11*
	Rs. 1001-2000	26	14	43.59	12	22.95	Df 3
	Rs. 2001-3001	15	7	23.08	9	18.03	S
	Rs. 3001 & above	23	8	25.64	11	21.31	
7	Source of information						

Health personals	40	3	10.25	24	26.22	2.3*
Mass media	18	2	5.12	11	13.11	Df 3
Neighbors & caretaker	17	4	7.69	16	19.67	NS
Others	00	0	0	0	0	

N.S- not significant, * and S –Significant at p,0.05 level

Data presented in above table indicated that association between demographic variables and knowledge scores on electro convulsive therapy.

There existing a significant association between knowledge score on electro convulsive therapy among caretaker of psychiatric patient and the selected demographic variables such as age ($x^2=13.12$), Religion ($x^2=9.33$), Family type ($x^2=10.9$), and monthly income ($x^2=11.$) was found. H1 is accepted.

There is no significant association between knowledge score and education ($x^2=5.44$), occupation ($x^2=8.12$ and source of information ($x^2=2.3$) caretaker of psychiatric patient.

DISCUSSION

This chapter discuss the finding of the study derived from statistical analysis and its pertinence to the objectives set for the study and related literature of the study.

Findings of the study is presented based on the objectives

- To assess existing knowledge regarding the electro convulsive therapy among caretaker of psychiatric patient, as measured by structured knowledge questionnaire.
- To assess existing attitude regarding the electro convulsive therapy among caretaker of psychiatric patient, as measured by structured knowledge questionnaire.
- To determine the association between knowledge scores with selected demographic variables.

Major finding of the study

The following conclusion were drawn on the basis of the findings of the study

1. Findings related to demographic characteristics

In age majority (37%) of the respondents were belongs to the age group of 3- 5years, 25% were belongs to the age group of 2-3years and 18.75% were belonged to the both age group below 1 years and 5 years and above respectably. In Education majority (25%) of the respondents were studied up to PU and above, 21% were illiterate, 19% were studied up to high school and remaining 15% were studied up to primary school. In occupation majority (27.75%) of the respondents was Coolie, 25% were Private employee, 18% were both others and Govt. employee. In religion majority (61%) of the respondents was Hindus, 17.5% were Muslims, 18.75% were Chastain and 2.5% were others. In type of the family majority(47.5%) of the respondents were joint family, 43.75% were nuclear family, 16.25% were single family and only 5% were extended family. In income majority(32.5%) of the respondents were belongs to income group 1001 – 2000/ month, 28.75% were belonged to below 1000/ per month, 20% were belonged to the income group of 3001 and above and remaining 28.75% were belonged to income group of 2001-3000/month. In Source of information majority (56.25%) of the respondents were got information from health personals, 18% were from Neighbors & caretaker and 17% from mass media.

2. Knowledge on electro convulsive therapy among the caretaker of psychiatric patient.

The overall mean percentage knowledge score on regarding electro convulsive therapy is found to be 48.94% with SD 2.45 among the respondents. Majority (53.23%) of the respondent have moderate

knowledge on Complication of electro convulsive therapy, followed by 52.75% of Complication of electro convulsive therapy, 48.6% of Preparation for electro convulsive therapy, 43% of General information, 42.2% of Purpose of electro convulsive therapy, 39.8% Importance of electro convulsive therapy.

3. Assessment of attitude score.

The overall attitude of the caretaker of psychiatric patient 65.6% and in that 56.3% are negative attitude and 70.6% are positive attitude regarding the electro convulsive therapy.

4. Association between demographic variables and knowledge scores on electro convulsive therapy.

There existing a significant association between knowledge score on regarding electro convulsive therapy among caretaker of psychiatric patient and the selected demographic variables such as age ($x^2=13.12$), Religion ($x^2=9.33$), Family type ($x^2=10.9$), and monthly income ($x^2=11.$) was found. H1 is accepted. There is no significant association between knowledge score and education ($x^2=5.44$), occupation ($x^2=8.12$ and source of information ($x^2=2.3$) caretaker of psychiatric patient.

Summary

This chapter dealt with the discussion related to findings of the study of demographic variables of caretaker of psychiatric patient, their knowledge regarding electro convulsive therapy, and association of demographic variables with the study findings.

CONCLUSION

On the basis of finding of the study the below set conclusions were drawn. It also bring about the limitation of study in to practice. The implementation are given on the various aspects like nursing education, nursing practice, nursing administration and it also gives insight in to the future studies.

Many studies show that there is a lack of knowledge on electro convulsive therapy method among caretaker of psychiatric patient. The study was based on the Pender's health promotion modal (1996). It is one of the most widely used models to explain why people do or do not take preventive health action.

Implications

The findings of this study have implications for nursing practice, nursing education, nursing administration, and nursing research.

Implication to nursing practice

- Health education is an important tool for health care. It is one of the most cost effective interventions. It is concerned with promoting health.
- The extended and expanded role of professional nurse emphasizes more about the preventive and promotive aspects of the health.
- The present study would help the nurse to develop an understanding about the knowledge of caretaker of psychiatric patient regarding the electro convulsive therapy.

Implications to nursing research

- The emphasis on research and clinical status is to improve the quality of nursing care. Nurses need to engage in multidisciplinary research so that it will help to improve their knowledge and skill while applying it into practice, many health problems can be solved.
- The nurses should conduct research on various aspects of electro convulsive therapy which provides more scientific data and adds more scientific body of information to the nursing profession.

- Innovative methods and techniques of teaching and learning have to be implemented in education, as well as clinical research, which is a challenging task in the era of improved technology
- Nurse researcher should be aware of the health care system and formulating new theories. Researchers can improve the knowledge, skill and attitude of nurses and ultimately can improve the status and standards of nursing profession.

Implications to nursing administration

- The knowledge of the nurses may be updated through in-service education and refresher courses regarding electro convulsive therapy.
- The nurse administrator can organize community level programmes to increase awareness on electro convulsive therapy
- The nurse administrators can collaborate with the other health care providers to organize education programs.

Limitations

- The study was limited to caretaker of psychiatric patient.
- The study was limited to the selected hospital at Bangalore.

Recommendations

Having become familiar with the problems faced during the study and keeping the limitations in view, the following recommendations are offered for further research.

- A comparative study can be conducted to assess the knowledge of rural and urban patient.
- A large scale study needs to be carried out to generalize the findings.

SUMMARY

This chapter presents a brief summary of research study. This chapter also includes recommendations for future research and limitations of the study.

The main aim of the study was to assess the knowledge and attitude regarding electro convulsive therapy among caretaker of psychiatric patient in a selected hospital Bengaluru.

Objectives of the study

The objectives of the study are:

- To assess existing knowledge regarding the electro convulsive therapy among caretaker of psychiatric patient, as measured by structured knowledge questionnaire.
- To assess existing attitude regarding the electro convulsive therapy among caretaker of psychiatric patient, as measured by structured knowledge questionnaire.
- To determine the association between knowledge scores with selected demographic variables.

Assumptions

The investigator assumes that:

Caretaker of psychiatric patient may have some knowledge regarding electro convulsive therapy

Hypothesis

The hypothesis will be tested at 0.05 level of significance.