



# **A Study To Assess The Effectiveness Of Lecture Cum Demonstration On Knowledge Regarding Cranial Nerve Examination Among The Basic B.Sc. Nursing 3rd Year Students In Selected Nursing College At Yavatmal**

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**Abstract:** A study to assess the effectiveness of Lecture cum Demonstration on knowledge regarding Cranial Nerve Examination among the Basic B.Sc. Nursing 3rd year students in selected Nursing College at Yavatmal.

**Introduction:-** This study was conducted to assess the effectiveness of Lecture cum Demonstration on knowledge regarding Cranial Nerve Examination among the Basic B.Sc. Nursing 3rd year students in selected Nursing College at Yavatmal. **Objectives:** The main objective was to assess the effectiveness before and after Lecture cum Demonstration method on Cranial Nerve Examination in terms of knowledge. **Research Approach:** A quantitative evaluative approach was considered as appropriate for the present study. **Research Design:** In this study one group pre-test post- test research design was used. **Sample:** 40 students of Basic B.Sc. Nursing 3rd year had participated in this study. **Sampling Technique:** Non probability convenience sampling technique was used for the present study. **Tool:** Structural knowledge questionnaires to evaluate knowledge was used to collect information. **Result:** In pre-test, out of 34 subjects 47.1% of subjects in pre-test had average and good level of knowledge score and 2.9% had poor and excellent level of knowledge score. Mean pre-test knowledge score of the subjects was  $10.52 \pm 3.096$ . Minimum knowledge score in pre- test was 04 and maximum knowledge score in pre-test was 16. While in post-test, out of 34 subjects the majority 79.4% of subjects in post-test had excellent level of knowledge score, 20.6% had good level of knowledge score and 0% had poor and average level of knowledge score. Mean post-test knowledge score of the subjects was  $16.50 \pm 1.051$ . Minimum knowledge score in post-test was 15 and maximum knowledge score in post-test was 18. **Conclusion:** After the detailed analysis of the data, it was concluded that the Lecture cum Demonstration method helps the students to improve their knowledge regarding Cranial Nerve Examination.

## CHAPTER I

### BACKGROUND OF STUDY

**“God May Forgive Your Sins, But Your Nervous System Wont.”**

-(Alfred Korzybski)

Neurology is the branch of medicine that dealing with disorders of the nervous system. Cranial nerve examination is the assessment of sensory neurons and motor responses, especially Reflexes to determine whether the nervous system is impaired or not it is divided into five components, Cerebral function, Cranial nerves, Motor system, sensory function and Reflexes to determine whether the nervous system is impaired or not. It can be used as screening tool and as an investigative tool. (**Vivek D. Jamnik, 2019**)

Nervous system is the chief controlling and coordinating system of the body. It is responsible for Judgement. Intelligence and memory. It is most complex system of body. It is adjust the body to the surrounding and regulate all bodily activities both voluntary and involuntary. The sensory part of the Nervous system collects information from the surrounding and helps in gaining the knowledge and experience where as the motor part is responsible for responses of the body.

### NEED FOR THE STUDY

Nurses in the many practices setting encounter patients with altered Neurological function. The disorder of the nervous system can occur at any time during the life span and can vary from mild, self-limiting symptoms to devastating, life threatening disorders. Nurses must be skilled in the general assessment of Cranial nerves function and be able to focus on specific areas as needed. Assessment requires knowledge of the anatomy and physiology of the nervous system and an understanding of array of test and procedure used to diagnosed Neurological disorder. Knowledge about the nursing implications and interventions related to assessment and diagnostic testing is also essential. Assessment of the client experiencing Cranial nerves disorder is a challenge. Cranial nerves disorder range from the simple to complex and can have profound consequences for activities of daily living (ADL) and Survival. (**Brunner and Siddharth's 2018**)

### OBJECTIVES OF THE STUDY

1. To develop and validate lectures cum demonstration regarding cranial nerve examination
2. To evaluate the effectiveness before and after Lecture cum demonstration method on cranial nerve examination in terms of knowledge.
3. To compare the pre-test and post-test knowledge on Lecture cum demonstration regarding cranial nerve examination
4. To find the association between post-test knowledge on cranial nerve examination with selected demographic variable.

### HYPOTHESIS

H 1. The pre-test knowledge is less than the post-test knowledge regarding Cranial Nerve Examination among Basic B.Sc. Nursing 3rd year students

H 2. There is a significant difference between pre-test knowledge and post-test knowledge regarding Cranial Nerve Examination among Basic B.Sc. Nursing 3rd year students.

H 3. There is a association between post-test knowledge of Cranial Nerve Examination with selected demographic variables.

### OPERATIONAL DEFINITION

- **Study:-** According to oxford dictionary, the study means any activity or process of learning about something by reading, memorizing facts, attending school, etc.

In this study it refers to the difference of knowledge of students regarding Cranial Nerve Examination.

- **Assess:** - According to the Cambridge Dictionary, to judge or decide the amount, value, quantity or importance of something.

In this study it refers to the difference of knowledge of students regarding Cranial Nerve Examination.

- **Effectiveness:** - According to oxford dictionary, the degree to which something is successful in producing a desired result or success.

In this study, effectiveness refers to the outcomes of the lecture cum demonstration method in term of knowledge on Cranial Nerve Examination among Basic B.Sc. Nursing 3rd year students.

- **Lecture Method:** - According to Oxford Dictionary a talk that is given to a group of people to teach them about a particular subject, often as part of a university or college course.

In this study, lecture method motivates students to gain more knowledge regarding the cranial nerve examination.

- **Demonstration Method:** - According to the Cambridge dictionary, the act of showing something or how something works.

In this study, demonstration method generates the interest among Basic B.Sc. Nursing students about Cranial Nerve Examination.

- **Cranial Nerve:** -According to Oxford dictionary, the Cranial Nerves are a set of 12 paired Nerves in the back of your brain.

In this study, we are checking the previous knowledge of students regarding Cranial Nerve.

In this study, the cranial nerve examination is performed to look for any signs of brain dysfunction.

- **Nursing students:** - According to the Cambridge dictionary, person who are studying at school, college, university in nursing.

In this study, nursing students refer to the who is studying in Basic BSC (N) 3rd year.

#### ASSUMPTION :-

1. The B.Sc. Nursing 3rd year students in the Smt. Sumitrabai Thakre College of Nursing may have some knowledge regarding Cranial Nerve Examination.
2. Lecture cum Demonstration method of teaching may have impact on students learning.
3. There will be association between the post-test knowledge with the selected demographic variables.

#### LIMITATION :-

- The study is limited to only under graduate Basic. B.Sc. 3rd Nursing student.
- The sample size is limited to 40 students.
- The study is limited to Nursing student who are willing to participate in the study.

#### DELIMITATIONS

- Study assess knowledge regarding Cranial Nerve Examination Only.

#### CONCEPTUAL FRAMEWORK :-

“Conceptual framework represent way of thinking about a problem or a study or a way of representing how complex things are.” (Bordage, 2009)

“Conceptual framework is an interrelated concept or abstractions assembled in a rational and often explanatory scheme to illuminate relationship among them.” (Polite and Beck)

Conceptual framework is analogous to the frame of house just as the intention support a house conceptual framework provides a rationale for predictions about relationship among variable in the research study.

Concept is defined as complex formulation of object property or extend that is derived from individual perception and experience concept of respect characteristics of the object that are being studied.

**Conceptual framework, conceptual model or conceptual schemes represent as it final attempt at organizing phenomenon that their conceptual framework deals with obstruction that are assembled by virtues of their relevance to a common them both conceptual schemes and theories use concept as building block.** (Pilot And Hungler (1991))

## THROUGHPUT/PROCESS

It refers to process by which the system process input and releases an output.

In present study, throughput refers to the process of transformation of knowledge regarding cranial nerve examination through the lecture cum demonstration method.

## OUTPUT

In this study, output refers to increased knowledge regarding cranial nerve examination among the students is assessed by post-test feedback can be assessed by statistical measurement of score obtained by subject expert and post questionnaire.

The outcome may either positive or negative. If the knowledge of the students regarding cranial nerve examination is increase after administrating the lecture cum demonstration method, then it is said to be the positive outcome and if there is no gain of knowledge among the students, then it is said to be negative outcome.

## CHAPTER II

### REVIEW OF LITERATURE

Review of related literature is a essential part of any study of research of the research project. It enhances the knowledge and inspires a clear insight into the problems. Literature review throws light on the studies and their findings reported about the problem under study.

In this chapter, the review of literature are given under following headings:-

1) Studies on Lecture cum Demonstration

2) Studies on Cranial Nerves Examination

3) Studies on Lecture cum Demonstration on Cranial Nerves Examination.

#### † Studies on lecture cum demonstration:

Deepshikha David, Simarjeet Kaur and et al (2020), conducted a study which aimed to assess Efficacy of Lecture cum demonstration versus video-based teaching regarding active management of third stage of labor in terms of knowledge and skills of GNM students: An interventional study. This was a quasi-experimental study conducted on 100 GNM third-year students selected by purposive sampling and randomly assigned to LCD (n = 50) and VBT (n = 50) groups. Sample characteristics perform, Structured Knowledge Questionnaire, and observational checklist were used to collect data from GNM students through self-report and observational technique. The study results showed that the mean post-test knowledge scores of LCD ( $17.32 \pm 2.14$ ) and VBT group ( $16.90 \pm 2.41$ ) were nearly equal and mean rank post-test skills score of LCD group (54.40) was slightly higher than VBT group (49.51), but computed “ t ” value of mean post-test knowledge and computed “ Z ” value of skill score of both LCD and VBT group level of significance. It can be concluded that both LCD and VBT were found to be effective in improving knowledge and skills of GNM students regarding AMTSL.

Patricia Reddy, Ancy Ramesh (2021), had conducted a study to assess the Effectiveness of Lecture cum demonstration on Knowledge and practice regarding Intravenous cannulation among staff nurses working in selected hospital. This study was aimed to assess the existing knowledge regarding intravenous cannulation among staff nurses working in selected hospital. Pre experimental one group pre test post test design were used in this study. Structured knowledge questionnaire and Observational checklist are the methods used in this study. Sample size in this study was 60. Among the 60 samples, according to age, 39(65%) of subjects were of 21-30 years of age, 14(23.33%) were of 31-40 years, 7(11.67%) were of 41-50 years and no subjects were above 50 years. According to the educational qualification, 38(58.33%) of the subjects were with the qualification of general nurse midwives, 12(20%) were B.sc nursing, 13(21.67%) were PB.B.sc Nursing. Majority of the subjects 45% have work experience of less than 2 years, 23.33% have 3-5 years, 20% have 6-8 years and 11.67% of them have work experience of more than 8 years In relation to area of work, 26.67% of the subjects each were from the Medicine ward and surgical.

### **Studies on cranial nerve examination: -**

**Aparna Pandey, Vijaya Kumar S, (2020)**, had conducted a study to Evaluate Effectiveness of Lecture using Power Point on Knowledge and skill regarding Cranial Nerve assessment among B.Sc. Nursing Students. The purpose of the study was to evaluate the effectiveness of lecture using PowerPoint on the knowledge and skill regarding cranial nerve assessment among B. Sc nursing students. Pre-experimental research design was used to carry out the study in selected nursing colleges at Lucknow among the 200 3rd year B. Sc nursing students and convenient sampling technique was used for the selection of students. The findings evidenced that lecture cum PPT was effective in improving knowledge and skill regarding cranial nerve assessment.

**Latha T,(2011)** , conducted a evaluative study to evaluate the effectiveness of two Teaching Methods on 'Cranial Nerve Assessment A study was conducted to find the effectiveness of two teaching methods for 'Cranial Nerve Assessment', on knowledge and skill of Undergraduate Nursing Students was conducted with the aim to compare Teacher Guided Instruction (TGI) and Computer Assisted Instruction (CAI). Method The data were collected using Base line information, Interpretive Exercises and Observational Checklist on Cranial Nerve Assessment. The study adopted a quasi experimental (pre experimental) design with evaluative approach. The samples were 64 (TGI=34 and CAI=30) students 2nd year B.Sc. Nursing. The students were divided into two groups and were taught using TGI and CAI respectively. Result In comparison between the effectiveness of two teaching methods, TGI and CAI, both the teaching methods were effective to improve the knowledge and skill of Cranial Nerve Assessment (CAN) and there was no significant difference ( $t(62)=0.13$ (knowledge) and  $t(62)=0.185$ (skill)) found in the resultant knowledge and skill of students in Cranial Nerve Assessment. Conclusion The science and general education is advancing every day. Hence changes in nursing curriculum are done frequently. Instruction methods also must be changed along with curriculum change, without which objectives may not be achieved effectively.

Firas Mourad, Giovanni Lopez, and et al (2021), conducted a study for Assessing Cranial Nerves in Physical Therapy Practice: Findings from a Cross-Sectional Survey and Implication for Clinical Practice. Researchers aimed to investigate the knowledge, skills, and utilization of cranial nerve examination of Italian physiotherapists. An online cross-sectional survey method were used in this study. 396 participants were completed the survey. The researcher conclude that a substantial proportion of Italian physiotherapists are not schooled in the fundamentals of cranial nerve examination.

### **Studies on Lecture cum Demonstration and Cranial Nerve Examination :-**

**Aparna Pandey, Vijaya Kumar S, (2018)**, had conducted a study to evaluate the effectiveness of lecture cum demonstration on knowledge and skill regarding Cranial Nerve assessment among B.Sc Nursing students. The aim of this research was to identify the efficacy of lecture cum demonstration on the knowledge and skills of the nursing students regarding cranial nerve assessment. The pre-experimental research design approach was considered appropriate for conducting this study. About 200 nursing students getting education in hand-picked nursing colleges of Lucknow were considered appropriate for this study. The relevant fact was gathered using self-prepared multiple choice knowledge questionnaires and an observation check list to assess the clinical expertise of the students. The result of this study found that the lecture cum demonstration was effectual in upgrading the knowledge and clinical expertise of the student nurses.

**Vivek D. Jamnik, (2018)**, conducted a evaluative study to assess the effectiveness of lecture cum demonstration method on knowledge and skill regarding cranial nerve assessment among under graduate nursing students in selected nursing college. Objectives of study were to assess existing knowledge and skill regarding cranial nerve assessments among under graduates students of selected nursing college, to evaluate effectiveness of lecture cum demonstration method regarding cranial nerve assessments among under graduates students of selected nursing college and to find out association between pre-test knowledge score with their selected demographic variables. Quasi experimental one group pre-test post-test design and quantitative approach was carried out on 60 nursing students selected by simple random.

Aparna Pandey, Vijaya Kumar S, (2020), conducted a comparative study on effectiveness of lecture using PowerPoint versus lecture cum demonstration on knowledge and skill regarding cranial nerve assessment among B.Sc. nursing students. With a focus to identify an effective teaching method, comparison between the traditional teaching methods with computer aided learning this study was done. A total of 400 students studying in various nursing colleges formed the sample of this study. The students were divided into the experimental and control group and a self-prepared MCQ along with observation check list was used to assess the knowledge and skills of the nursing students. On analysis both the methods were found to be equally effective in enhancing the knowledge and skills of the students, but the researcher found that the lecture using PowerPoint was more effective than lecture cum demonstration.

## RESEARCHMETHODOLOGY

### INTRODUCTION: -

Education is not about going to school and getting a degree it's about widening your knowledge and absorbing the truth about life.

(Shakuntala Devi)

This chapter deals with methodology of the study to assess the effectiveness of lecture cum demonstration on knowledge regarding cranial nerve examination.

The research methodology organizes all the components of the study in a way that is most likely to lead to valid and answer to the subproblems that have been posed. It also indicates general pattern for organizing the procedures for development of the tool and procedure for data collection and plan for analyzing.

### RESEARCHDESIGN:-

The research design guides the researcher planning and implementing the study in a way that is most likely to achieve the intended goal.

A research design incorporates the most important methodology decision that a researcher makes in conducting a research study. The design depends upon the levels of inquiry of the researchers and determines the methods used to obtain the sample, collect data, analyze and interpret results. Depending upon the purpose of the study pre-experimental test of group and post -experimental test design was adopted for this study after interpreting the pre and post-test, researchers conclude the effectiveness of the lecture cum demonstration regarding Cranial Nerve Examination among BSc Nursing 3<sup>rd</sup> year Nursing student at selected Nursing College, Yavatmal.

## RESEARCH APPROACH:-

A research approach tells the researcher what data to be collected and how to analyze it. It also suggests possible conclusion to be drawn from the data. In view of the nature of the problem selected for the study and objectives to be accomplished.

A quantitative evaluative approach is considered as appropriate for the present study to assess the effectiveness of lecture cum demonstration on cranial nerve examination among the basic BSc nursing 3<sup>rd</sup> year in selected nursing collage.

This study was conducted in three phases include the assess the knowledge before intervention i.e., pre-test, intervention i.e., lecture cum demonstration and post-test i.e., assessment of knowledge after intervention.

Phase1	Pre-test
Phase2	Lecturecum demonstration
Phase3	Post-test

## SETTING OF THE STUDY:-

The study was undertaken in Smt. Sumitra Bai Thakare College of Nursing, Yavatmal.

## POPULATION:-

A population is a complete set of person or object that process some common characteristics this of interest to the research.

(Bharat Parek, 1998)

In this study, the population consisted of Basic B.Sc. Nursing 3<sup>rd</sup> Year Students.

## SAMPLE:-

Sample consists of subset of population to participate in research study.

(Wilson, 1989)

Samples for the present study is Basic B.Sc. Nursing 3<sup>rd</sup> Year Students studied at selected Nursing College at Yavatmal.

## SAMPLE SIZE:-

The quantitative investigation objective is to generalize the sample result to population will need to from the target population will need to sample from the target population and must decide how large a sample will produce sufficient data to allow for such generalization. (**Polit And Hungler, 1986**)

The sample size consists of 40 students of selected Nursing College at Yavatmal for the present study.

#### SAMPLINGTECHNIQUE:-

Sampling refers to the process of selecting the portion of the population to represent the entire population.

(BT Basavanhappa,1978)

Nonprobability Convenience Sampling Techniques is a part of the sampling technique in which each sample has an equal probability of being chosen.

NonProbability Convenience Sampling Technique was used to select the sample of the present study. All the students in B.Sc. Nursing 3rd year in selected Nursing College at Yavatmal. were selected as sample for the study.

#### CRITERIAFORTHESAMPLESELECTION:-

##### ○ INCLUSIVECRITERIA

- The Students of Basic BSc Nursing 3rd Year
- Students Who Are Willing to Participate in The Study.

##### ○ EXCLUSIVECRITERIA

- The student who are absent during data collection period
- Those students who are not willing to participate in the study.

#### METHODSOFDEVELOPINGTOOL:-

The structural questionnaire was used to collect the data required for the study (Jalbot LA, 1995)

**SECTION A:** Demographic variables consist of age, sex and previous knowledge.

**SECTIONB:** Consist of questions related to knowledge regarding cranial nerve examination.

- Definition of Cranial Nerve Examination.
- Purpose of Cranial Nerve Examination.
- Indication of Cranial Nerve Examination.
- Advantages of Cranial Nerve Examination.
- Contraindication of Cranial Nerve Examination.

There are 20 questions on knowledge regarding Cranial Nerve Examination score is 20.

**SCORING:-**

Square one was given every correct answer 0 was given to every wrong answer based on the percentage of score level of knowledge was graded as follows

Level of knowledge	Score	Percentage
Poor	0-5	0-25%
Inadequate	6-10	26-50%
Adequate	11-15	51-75%
Good/ excellent	16-20	76-100%

**VALIDITY OF THE TOOL:-**

validity of the tool was assessed using content validity. Content validity was determined by expert from nursing and medical field. They suggested certain modifications in the tool. After the modifications they agreed this tool for assessing effectiveness of training program on knowledge regarding Selected Cranial Nerve Examination among the Basic B.Sc. Nursing 3rd year Student in selected Nursing College at Yavatmal.

**RELIABILITY OF THE TOOL:-**

Reliability is the degree of consistency with which an instrument measures the attribute which is design to measure.

According to Polit and Black reliability of the tool is a major criterion for assessing its quality and adequacy. It is degree of dependability with which an instrument measure the attribute it is designed to measure.

The reliability of the tool was assessed by using test-retest method its correlation coefficients  $\rho$  values are 0.76. The correlation coefficient was high. So, the tool was appropriate and used to assess the effectiveness of training program on knowledge regarding Cranial Nerve Examination among Basic BSc Nursing 3<sup>rd</sup> year students in selected Nursing College at Yavatmal.

**PILOT STUDY:-**

In order to test the appropriate and feasibility of the study. The pilot study was conducted in selected Nursing College, Yavatmal. Among 05 student as in the Same way as the final study.

Data were analyzed to find out the Suitability of statistics the Finding revealed that the study is convenient.

## METHODOFDATACOLLECTION:-

It is a precise systematic gathering of data relevant to research purpose or hypothesis of study the investigator as a whole person should be totally involved perceiving, reacting, interacting, reflecting and recording.

In this study, we have collected sample by pre-test

## DATA COLLECTION PROCEDURE:-

Pretest	Intervention	Post test
27-01-2023	31-02-2023	02-02-2023

After obtaining the prior written permission from the concerned authorities. we the researcher visited selected Nursing College. The data for the present study was collected through self- structured questionnaire on 27th January 2023 from the selected Nursing College. Pre-test was conducted on 27<sup>th</sup> January 2023 and post -test was conducted on 02<sup>nd</sup> February 2023.

Researcher approached the subject and introduced to the subjects and purpose of the study was explained to ensure better cooperation of subject. We were also informed that they can withdraw from the study at any time if they wish to do so. Instructed them not to interact with each other.

The participants were collected in the teaching room available in selected Nursing College. And structured questionnaire was administered.

Once the questionnaire was completed, researcher collected it back. The subject required approximately 30 minutes to complete the structured questionnaire.

After the pre-test planned teaching method was Conducted on Cranial Nerve Examination.

On 7<sup>th</sup> day post test was conducted in the same manner with the same questionnaire for 2 consecutive days in all one shifts. The collection of data was performed within the stipulated time. After the data gathering process, the researcher thanked all the study sample as well as the authorities for their cooperation.

## DATAANALYSISPLAN

The data was decided to be analyzed, using descriptive and inferential Statistics on the basis of objectives and hypothesis of the study. To complete the data, a master data sheet was prepared by the investigator.

### 1) Descriptive statistics:

Demographic data containing sample characteristics like knowledge, would be analyzed by using frequency and percentage.

→ Pre-test and post-test scores would be compared by using mean, standard deviation and 't' value.

### 2) Inferential statistics-

Effectiveness of lecture cum demonstration method regarding cranial nerve examination will be analyzed by using paired 't' test.

## CHAPTER-IV

### ANALYSISANDINTERPRETATION

“Any one who has never made a mistake has never tried anything new.”

(Albert Einstein)

This chapter has dealt with analysis and interpretation of the data collected from 34 subjects from selected Nursing College at Yavatmal. The present study has been taken up to assess the effectiveness of lecture cum demonstration on knowledge regarding Cranial Nerve Examination among The Basic B.Sc. Nursing 3rd year students in selected Nursing College at Yavatmal. Analysis and interpretation are based on the objectives of the study.

A structured knowledge questionnaire was used for data collection. The analysis was done with the help of inferential and descriptive statistics.

## THE OBJECTIVES OF THE STUDY WERE

1. To develop and validate lectures cum demonstration regarding Cranial Nerve Examination
2. To evaluate the effectiveness before and after Lecture cum Demonstration method on Cranial Nerve Examination in terms of knowledge.
3. To compare the pre-test and post-test knowledge on Lecture cum demonstration regarding Cranial Nerve Examination.
4. To find the association between post-test knowledge on Cranial Nerve Examination with selected demographic variable.

## HYPOTHESIS:

- H1:-The pre-test knowledge is less than the post-test knowledge regarding Cranial Nerve Examination among Basic BSc Nursing 3rd year students.
- H2:-There is a significant difference between pre-test knowledge and post-test knowledge regarding Cranial Nerve Examination among Basic BSc Nursing 3rd year students.
- H3:- There is an association between post-test knowledge of Cranial Nerve Examination with selected demographic variables.

## ORGANIZATION OF FINDINGS

The analysis and interpretation of the observations are given in the following section:

- **Section A:** Distribution of subjects in relation to their demographic variables.
- **Section B:** Assessment of pre-test and post-test knowledge regarding Cranial Nerve Examination among The Basic B.Sc. Nursing 3rd year students in selected Nursing College at Yavatmal.
- **Section C:** Analysis of effectiveness of Lecture cum Demonstration on knowledge regarding Cranial Nerve Examination among The Basic B.Sc. Nursing 3rd year students in selected Nursing College at Yavatmal.
- **Section D:** Association of post-test knowledge scores regarding Cranial Nerve Examination among The Basic B.Sc. Nursing 3rd year students in selected Nursing College at Yavatmal with selected demographic variables.

### SECTION A

Distribution of subjects in relation to their demographic variables.

This section has dealt with percentage wise distribution of subject from selected nursing college

at Yavatmal in relation to their knowledge regarding Cranial Nerve Examination among The Basic B.Sc. Nursing 3rd year students and its interpretation with their demographic variables. Non-Probability convenience sampling technique with sample of 34 subjects was drawn from the selected college, who were from selected Nursing College at Yavatmal. The data was obtained to describe the sample characteristics including age in year, gender, religion, educational status and previous knowledge regarding Cranial Nerve Examination among The Basic B.Sc. Nursing 3rd year Students in selected Nursing College at Yavatmal respectively.

Table2: Distribution of subjects in relation to their demographic variable.

(n=34)

Demographic Variables	Frequency (f)	Percentage (%)
<b>Age in Year</b>		
18– 20 Year	10	29.4
21– 25 Year	24	70.6
Above 25 Year	00	00
<b>Gender</b>		
Male	11	32.4
Female	22	64.7
Other	01	2.9
<b>Religion</b>		
Hindu	20	58.8
Muslim	04	11.8
Buddhist	09	26.5
Other	01	2.9
<b>Educational Status</b>		
Literate	34	100
Illiterate	00	00
<b>Previous Knowledge</b>		
Electronic Media	11	32.4
As part of curriculum	17	50
Written Media	06	17.6

The above table no.2 depicts frequency and percentage wise distribution of subject in relation to their age in year, gender, religion, educational status and previous knowledge

regarding Cranial Nerve Examination among The Basic B.Sc. Nursing 3rd year students in selected Nursing College at Yavatmal respectively.

Distribution of subjects in relation to their age in year: Majority of the subjects 70.6% were from the age group of 21–25 years, 29.4% were from the age group of 18–20 years and 0% were above 25 years of age.

Distribution of subjects in relation to their gender: Majority of the subjects 64.7% were female, 32.4% were male and 2.9% other.

Distribution of subjects in relation to their religion: Majority of the subjects 58.8% were belongs to Hindu religion, 26.5% were belongs to Buddhist religion, 11.8% were belongs to Muslim religion and 2.9% were other religion.

Distribution of subjects in relation to their educational status: Majority of the subjects 100% were literate and 0% were illiterate.

Distribution of subjects in relation to their previous knowledge: Majority of the subjects 50% having knowledge from as a part of curriculum, 32.4% were from electronic media and 17.6% were getting knowledge from written media.

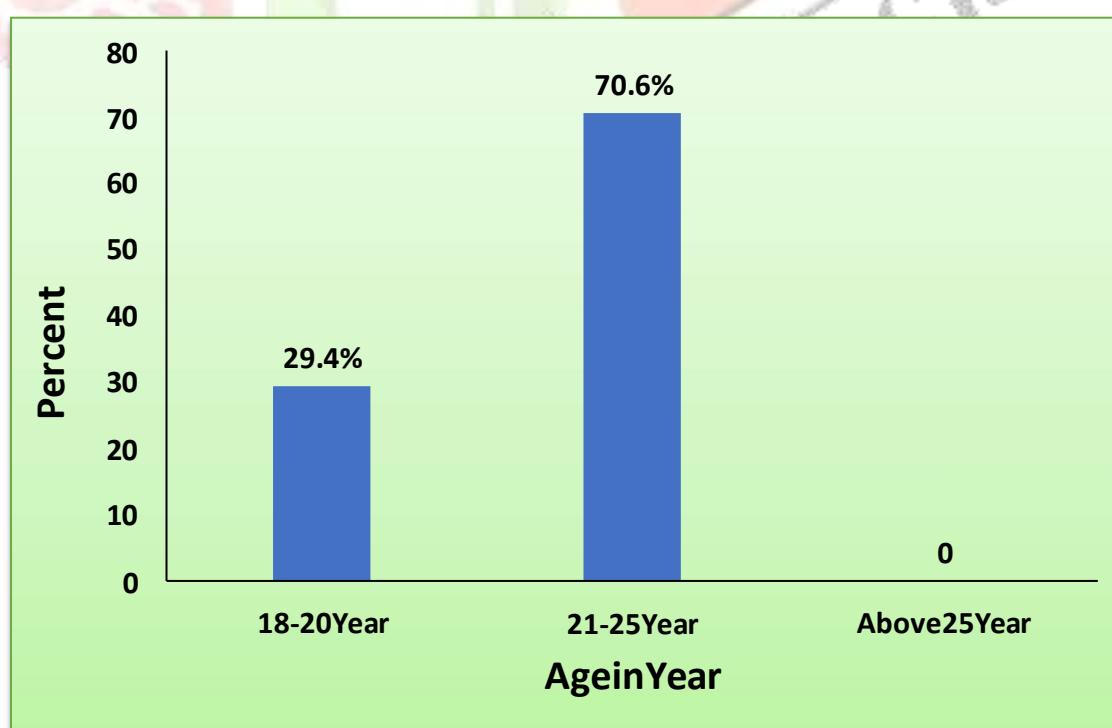


Figure 3: Distribution of subjects in relation to their age in year

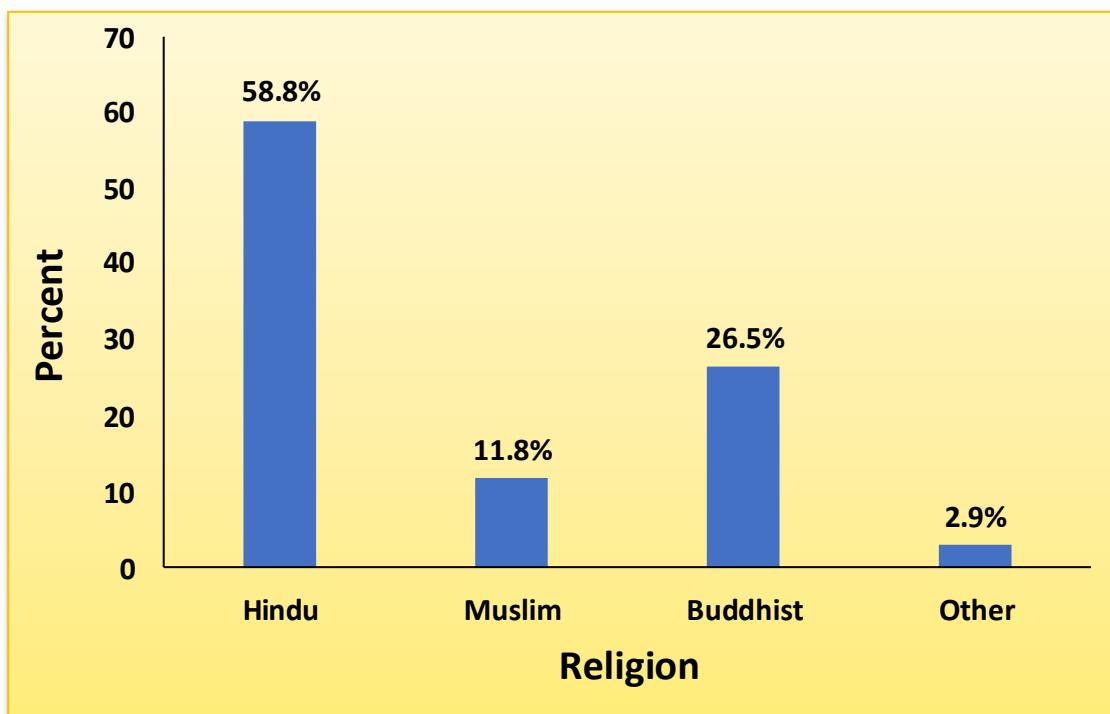


Figure4: Distribution of subjects in relation to their Religion

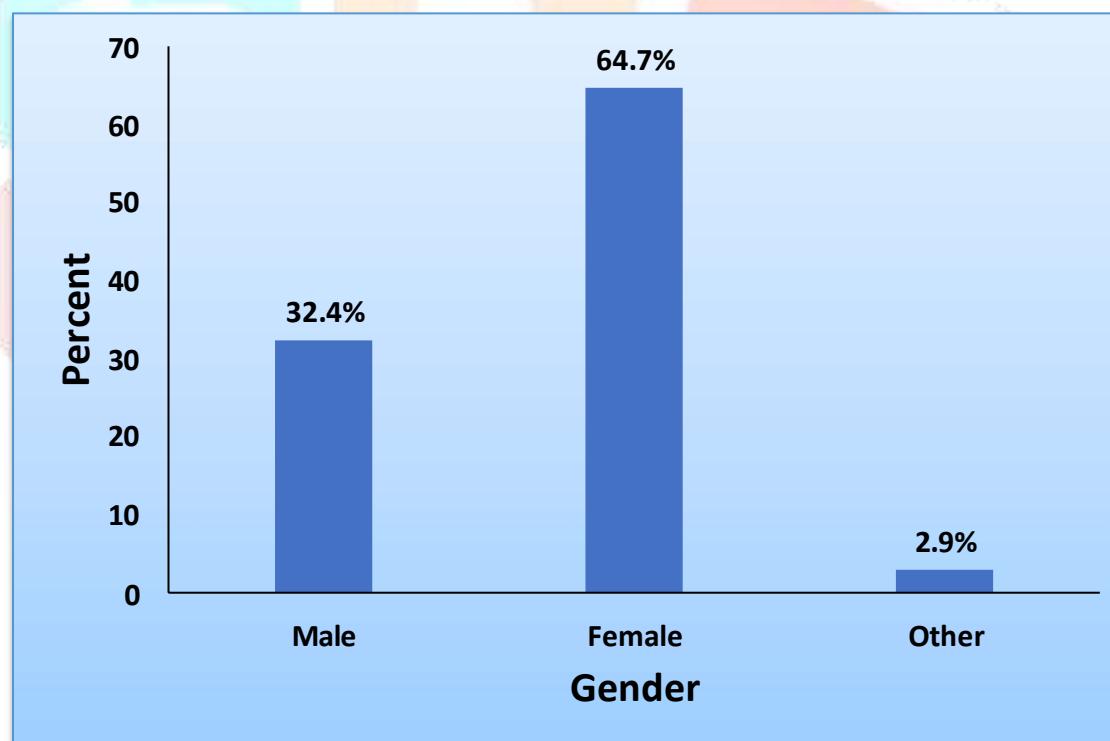


Figure5: Distribution of subjects in relation to their Gender

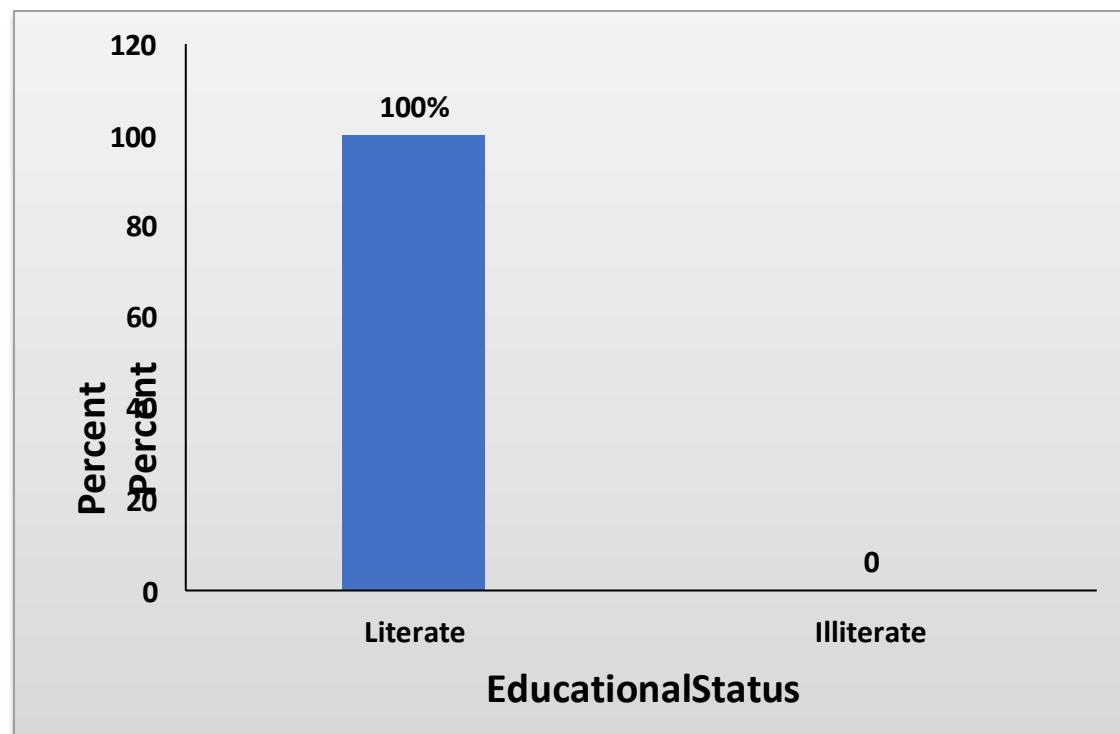


Figure6:Distributionofsubjects inrelationto theirEducationalStatus

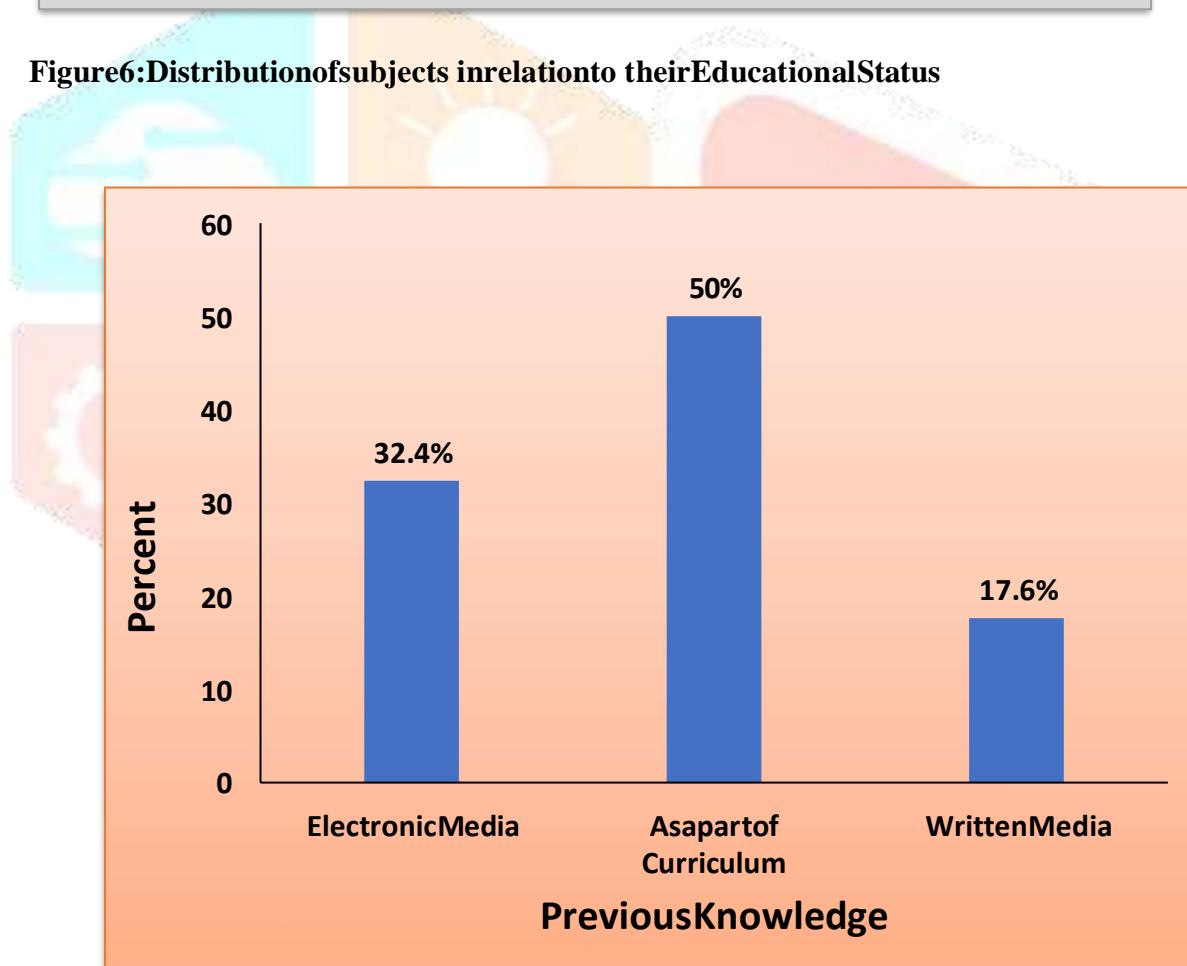


Figure7:Distributionofsubjects inrelationto theirPrevious Knowledge

## SECTIONB

## ASSESSMENT OF PRE-TEST AND POST-TEST KNOWLEDGE REGARDING CRANIAL NERVE EXAMINATION AMONG THE BASIC B.SC. NURSING 3RDYEAR STUDENTS IN SELECTED NURSING COLLEGE AT YAVATMAL.

This section has dealt with the assessment of pre-test and post-test knowledge regarding Cranial Nerve Examination among The Basic B.Sc. Nursing 3rd year students in selected Nursing College at Yavatmal. The levels of knowledge were categorized under categories: poor, average, good and excellent.

Table 3: Distribution of subjects in relation to their pre-test knowledge regarding Cranial Nerve Examination among The Basic B.Sc. Nursing 3rd year students in selected Nursing College at Yavatmal.

(n=34)

Level of knowledge score	Score Range	Percentage score	Level of Pre-test Knowledge Score	
			Frequency(f)	Percentage(%)
Poor	1 – 5	0-25%	01	2.9
Average	6 – 10	26-50%	16	47.1
Good	11 – 15	51-75%	16	47.1
Excellent	16 – 20	76-100%	01	2.9
Mean±SD knowledge score			10.52 ±3.096	
Mean% knowledge score			52.64%	
Minimum score			04	
Maximum score			16	

The above table no.3 shows the frequency and percentage wise distribution of subjects in relation to their pre-test level of knowledge regarding Cranial Nerve Examination among The Basic B.Sc. Nursing 3rd year students in selected Nursing College at Yavatmal.

Majority 47.1% of subjects in pre-test had average and good level of knowledge score and 2.9% had poor and excellent level of knowledge score.

Mean pre-test knowledge score of the subjects was  $10.52 \pm 3.096$ .

Minimum knowledge score in pre-test was 04 and

Maximum Knowledge score in pre-test was 16.

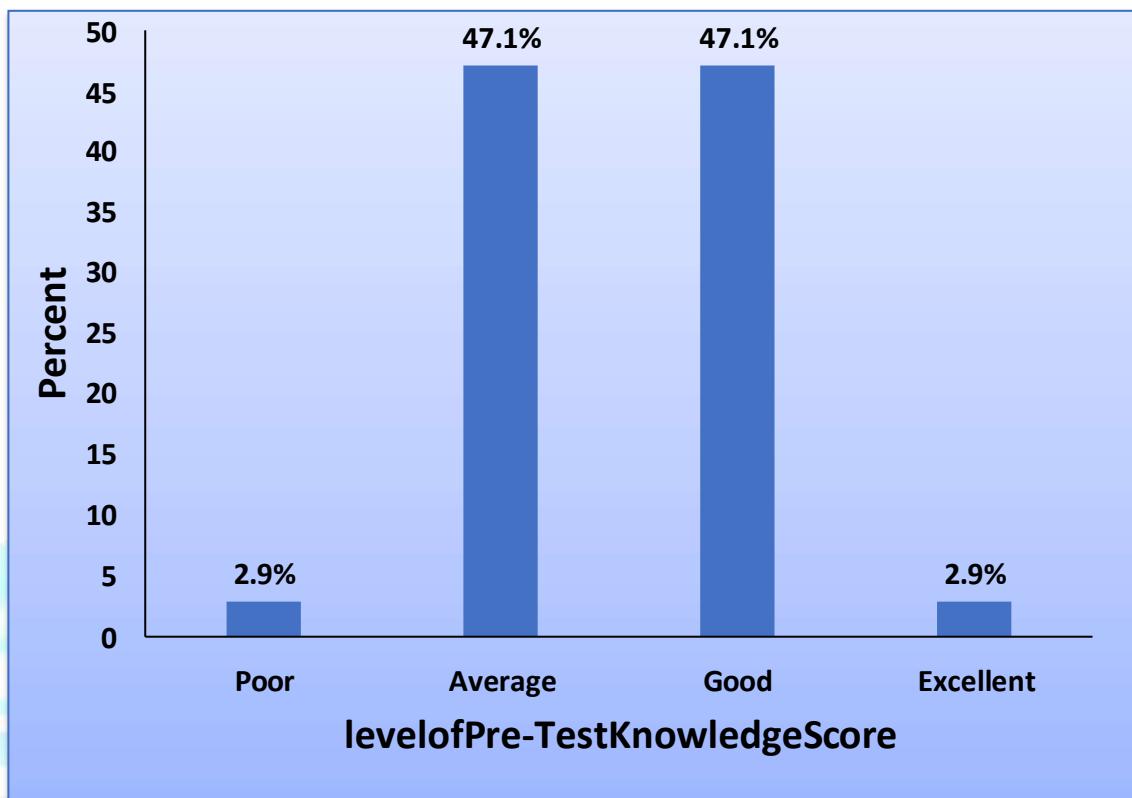


Figure 10: Distribution of subjects in relation to their pre-test knowledge regarding Cranial Nerve Examination among The Basic B.Sc. Nursing 3rd year students in selected Nursing College at Yavatmal.

**Table 4: Distribution of subjects in relation to their post-test knowledge regarding Cranial Nerve Examination among The Basic B.Sc. Nursing 3rd year students in selected Nursing College at Yavatmal.**

(n=34)

Level of knowledge score	Score Range	Percentage score	Level of Post-test Knowledge Score	
			Frequency(f)	Percentage(%)
Poor	1 – 5	0-25%	00	00

Average	6 – 10	26-34%	00	00
Good	11 – 15	51-75%	07	20.6
Excellent	16 – 20	76–100%	27	79.4
Mean±SDknowledgescore			16.50 $\pm$ 1.051	
Mean%knowledgescore			82.5%	
Minimumscore			15	
Maximum score			18	

Percent

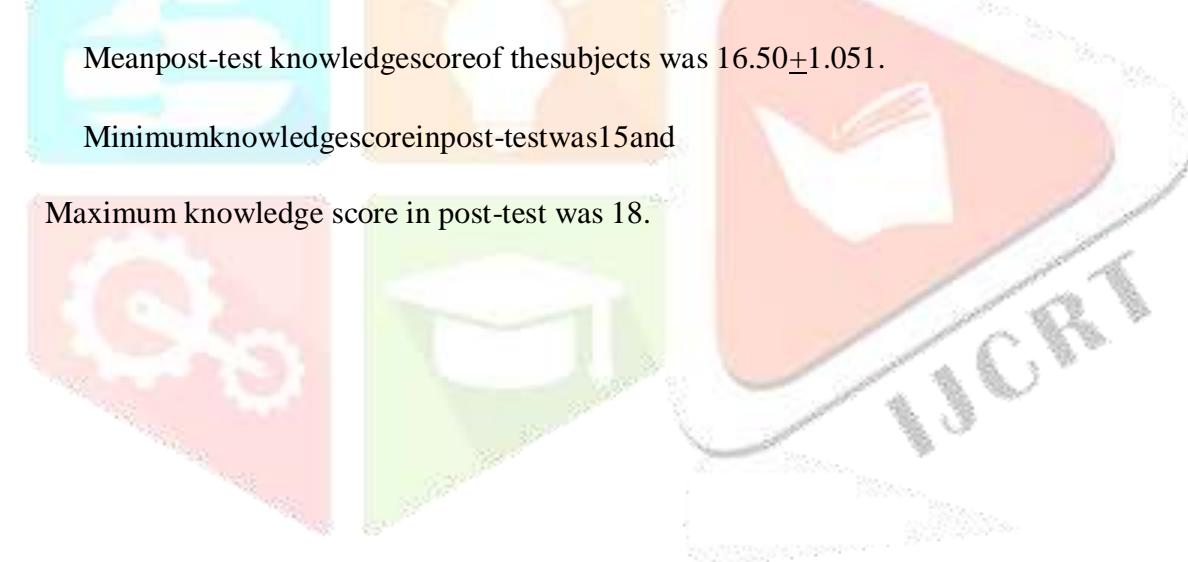
The above table no.4 shows the frequency and percentage wise distribution of subjects in relation to their post-test level of knowledge regarding Cranial Nerve Examination among The Basic B.Sc. Nursing 3rd year students in selected Nursing College at Yavatmal.

Majority 79.4% of subjects in post-test had excellent level of knowledge score, 20.6% had good level of knowledge score and 0% had poor and average level of knowledge score.

Mean post-test knowledge score of the subjects was  $16.50 \pm 1.051$ .

Minimum knowledge score in post-test was 15 and

Maximum knowledge score in post-test was 18.



## Level of Post-Test Knowledge Score

**Figure 11: Distribution of subjects in relation to their post-test knowledge regarding Cranial Nerve Examination among The Basic B.Sc. Nursing 3rd year students in selected Nursing College at Yavatmal**

## SECTION C

ANALYSIS OF EFFECTIVENESS OF LECTURE CUM DEMONSTRATION ON KNOWLEDGE REGARDING CRANIAL NERVE EXAMINATION AMONG THE BASIC B.SC. NURSING 3RD YEAR STUDENTS IN SELECTED NURSING COLLEGE AT YAVATMAL.

This section has dealt with the effectiveness of lecture cum demonstration about knowledge regarding Cranial Nerve Examination among The Basic B.Sc. Nursing 3rd year students in selected nursing college at Yavatmal. The hypothesis was tested statistically, the level of competency during the pre-test and post-test were compared to prove effectiveness of lecture cum demonstration significance of difference at 5% level of significance was tested with student's paired 't' test and tabulated 't' value was compared with calculated 't' value. Also the calculated 'p' values were compared with acceptable 'p' value i.e. 0.05 level of significance.

**Table 5: Significance of difference between knowledge scores in pre-test and post-test.**

(n=34)

Overall	Mean	SD	Mean Difference	t-value	p-value
Pre-Test	10.52	3.096	5.97 $\pm$ 3.009	11.566	0.0001 S.P < 0.05
Post-Test	16.50	1.051			
P < 0.05 level					*significant

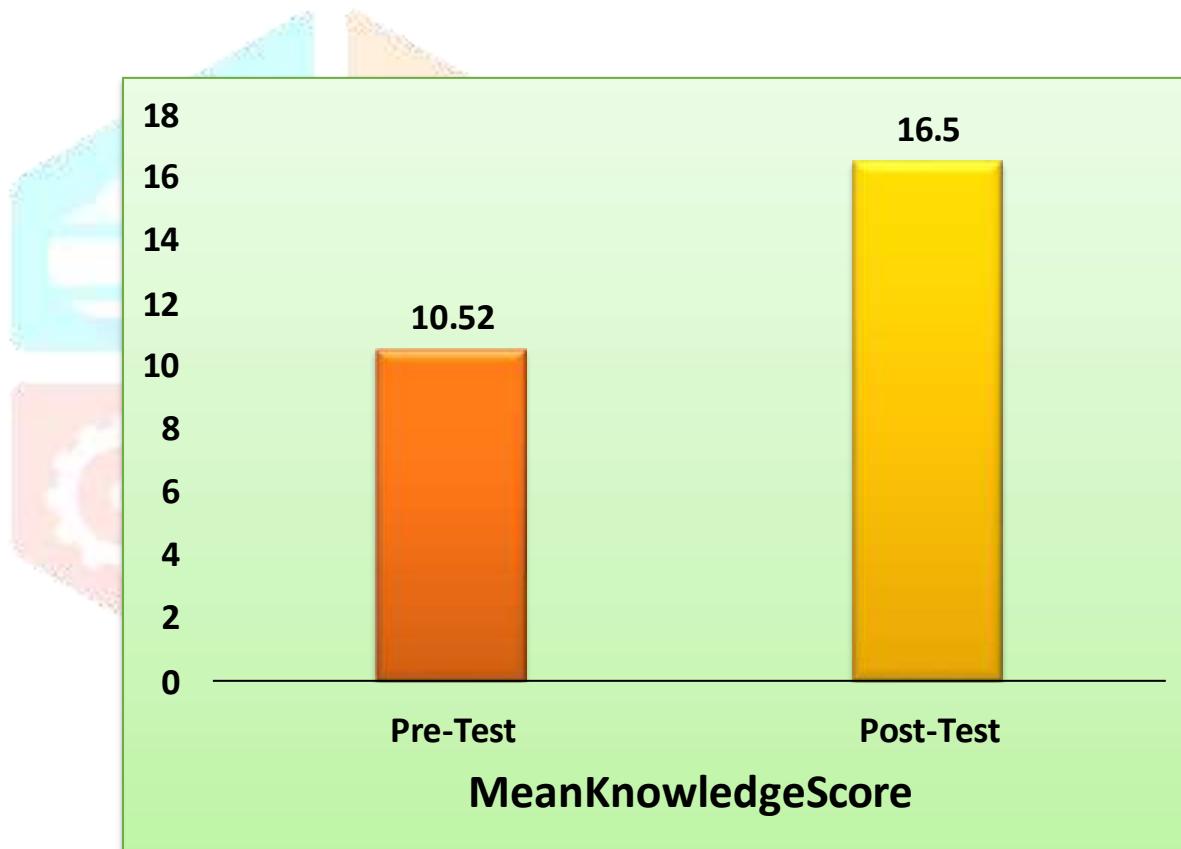
Table no. 5 depicts the overall mean pre-test and post-test knowledge scores of subjects which reveals that post-test mean knowledge score was higher 16.50 with SD of

$\pm 1.051$  when compared with mean pre-test knowledge score which was 10.52 with SD of  $\pm 3.096$ .

The statistical Student's paired 't' test was applied at 5% level of significance. The tabulated value for  $n=34-1$  i.e. 33 Degree of freedom was 33 is that 2.042. The calculated value

i.e. 11.566 was much higher than the tabulated value at 5% level of significance. For overall knowledge score of subjects which was statically acceptable level of significance.

Hence it was statistically interpreted that the Lecture cum Demonstration about knowledge regarding Cranial Nerve Examination among The Basic B.Sc. Nursing 3rd year students in selected Nursing College at Yavatmal was effective.



Thus,  $H_1$  is accepted and  $H_0$  is rejected.

**Figure 12: Significance of difference between knowledge scores in pre-test and post-test.**

## SECTION D

## ASSOCIATION OF POST-TEST KNOWLEDGE SCORE REGARDING CRANIAL NERVE EXAMINATION AMONG THE BASIC B.SC. NURSING 3RD YEAR STUDENTS IN SELECTED NURSING COLLEGE AT YAVATMAL WITH SELECTED DEMOGRAPHIC VARIABLES.

This section dealt with the association of post-test knowledge of subjects with selected demographic variables.

Table 6: Association of knowledge score in relation to their age in year.

n=34

Age in Year	No. of subjects	Mean knowledge score	Chi square	p-value
18–20 Year	10	16.50 $\pm$ 0.971	3.242	0.356 NS, P > 0.05
21–25 Year	24	16.50 $\pm$ 1.103		
Above 25 Year	00	00		
Degree of Freedom (df) = 3				

This table shows the association of knowledge scores with the age in year. The tabulated 'chi square ( $\chi^2$ )' value was 7.815 (df=3) which is higher than the calculated 'chi square ( $\chi^2$ )' i.e.

3.242 at 5% level of significance. Also, the calculated 'p' = 0.356 which was higher than the acceptable level of significance i.e. 'p' = 0.05. Hence it is interpreted that the age in year is not significant with their knowledge scores.

Table 7: Association of knowledge score in relation to their gender

n=34

Gender	No. of subjects	Mean knowledge score	Chi square	p-value
Male	11	16.45 $\pm$ 1.213	3.577	0.734 NS,P>0.05
Female	22	16.50 $\pm$ 1.011		
Other	01	17.00		
Degree of Freedom(df) = 6				

This table shows the association of knowledge scores with the gender. The tabulated 'chi square( $\chi^2$ )' value was 12.592 (df=6) which is higher than the calculated 'chi square( $\chi^2$ )' i.e.

3.577 at 5% level of significance. Also, the calculated 'p'=0.734 which was higher than the acceptable level of significance i.e. 'p'=0.05. Hence it is interpreted that the gender is not Significant with their knowledge scores.

Table 8: Association of knowledge score in relation to their religion

Religion	No. of subjects	Mean knowledge score	Chi square	p-value
Hindu	20	16.45 $\pm$ 1.050	6.536	0.685 NS,P>0.05
Muslim	04	16.75 $\pm$ 1.258		
Buddhist	09	16.33 $\pm$ 1.000		
Other	01	18.00		
Degree of Freedom(df) = 9				

This table shows the association of knowledge scores with the religion. The tabulated 'chi square( $\chi^2$ )' value was 16.919 (df=9) which is higher than the calculated 'chi square( $\chi^2$ )' i.e.

6.536 at 5% level of significance. Also, the calculated 'p'=0.685 which was higher than the acceptable level of significance i.e. 'p'=0.05. Hence it is interpreted that the religion is not Significant with their knowledge scores.

Table9:Association ofknowledgescorein relationtotheirprevious knowledge

n=34

Previous knowledge	No. of subjects	Mean knowledge score	Chi square	p-value
ElectronicMedia	11	$16.54 \pm 1.293$	7.784	0.254 NS,P>0.05
As a part of curriculum	17	$16.52 \pm 0.943$		
WrittenMedia	06	$16.33 \pm 1.032$		
Degreeof Freedom(df) =6				

This table shows the association of knowledge scores with Previous knowledge. The tabulated 'chisquare( $\chi^2$ )' value was 12.592(df=6) which is higher than the calculated 'chisquare ( $\chi^2$ )' i.e. 7.784 at 5% level of significance. Also, the calculated 'p' = 0.254 which was higher than the acceptable level of significance i.e. 'p' = 0.05. Hence it is interpreted that Previous knowledge is not Significant with their knowledge scores.

## SUMMARY OF THE FINDINGS

This chapter presents the analysis and interpretation of data collected from the subjects in selected area. In this study, majority of the subjects 70.6% were from the age group of 21 – 25 years, majority of the subjects 64.7% were female, majority of the subjects 58.8% were belong to Hindu religion, majority of the subjects 100% were literate and majority of the subjects 50% having knowledge from as a part of curriculum,

In pre-test, out of 34 subjects majority 47.1% of subjects in pre-test had average and good level of knowledge score and 2.9% had poor and excellent level of knowledge score. Mean pre-test knowledge score of the subjects was  $10.52 \pm 3.096$ . Minimum knowledge score in pre-test was 04 and Maximum Knowledge score in pre-test was 16.

While in post-test, out of 34 subjects the majority 79.4% of subjects in post-test had excellent level of knowledge score, 20.6% had good level of knowledge score and 0% had poor and average level of knowledge score. Mean post-test knowledge score of the subjects was 16.50

$\pm 1.051$ . Minimum knowledge score in post-test was 15 and Maximum knowledge score in post-test was 18.

The overall mean pre-test and post-test knowledge scores of subjects which reveals that post-test mean knowledge score was higher 16.50 with SD of  $\pm 1.051$  when compared with mean pre-test knowledge score which was 10.52 with SD of  $\pm 3.096$ .

The statistical Student's paired 't' test was applied at 5% level of significance. The tabulated value for  $n=34-1$  i.e. 33 Degree of freedom was 33 is that 2.042. The calculated value

i.e. 11.566 was much higher than the tabulated value at 5% level of significance. For overall knowledge score of subjects which was statically acceptable level of significance.

## SUMMARY

This chapter dealt with the statistical outcomes of demographic variables of subjects from selected area, effectiveness of Lecture cum Demonstration about knowledge regarding Cranial Nerve Examination among The Basic B.Sc. Nursing 3rd year students in selected nursing college at Yavatmal using descriptive and inferential statistics on the basis of previously drawn objectives. All relevant information regarding research findings is covered in this chapter.

## CHAPTER V

### DISCUSSION, RECOMMENDATIONS

### SUMMARY,

### CONCLUSION,IMPLICATION AND

## CHAPTER V

### DISCUSSION,SUMMARY,CONCLUSION,IMPLICATION AND RECOMMENDATION

## DISCUSSION

This chapter is discussing about the data analysis and interpreted according to the objective form.

The first objective of this study is to develop and validate Lecture cum Demonstration regarding Cranial Nerve Examination.

- We have prepared the lesson plan regarding Cranial Nerve Examination for the students of Basic BSc Nursing 3<sup>rd</sup> year in S.S.T.C.O.N Yavatmal.
- The lesson plan was checked and validated by our guide before the intervention with the reliability of 0.76.

The second objective of the study is to evaluate the effectiveness before and after Lecture cum Demonstration method on Cranial Nerve Examination in terms of knowledge.

The findings are,

**Pre-test:-**

-2.9 % Basic BSc Nursing 3<sup>rd</sup> year students have excellent knowledge regarding Cranial Nerve Examination.

-47.1% Basic BSc Nursing 3<sup>rd</sup> year students have good knowledge regarding Cranial Nerve Examination.

-47.1% Basic BSc Nursing 3<sup>rd</sup> year students have average knowledge regarding Cranial Nerve Examination.

-2.9%

Basic BSc Nursing 3<sup>rd</sup> year students have poor knowledge regarding Cranial Nerve Examination.

**Post-test:-**

-79.4% Basic BSc Nursing 3<sup>rd</sup> year students have excellent knowledge regarding Cranial Nerve Examination.

-20.65% Basic BSc Nursing 3<sup>rd</sup> year students have good knowledge regarding Cranial Nerve Examination.

-0% Basic BSc Nursing 3<sup>rd</sup> year students have average knowledge regarding Cranial Nerve Examination.

-0%

Basic BSc Nursing 3<sup>rd</sup> year students have poor knowledge regarding Cranial Nerve Examination.

The third objective is to compare the pre-test and post-test knowledge on Lecture cum Demonstration regarding Cranial Nerve Examination.

The findings are,

The findings shows the overall mean pre-test and post-test knowledge scores of subjects which reveals that post-test mean knowledge score was higher 16.50 with SD of  $\pm 1.051$  when compared with mean pre-test knowledge score which was 10.52 with SD of  $\pm 3.096$ .

The statistical Student's paired 't' test was applied at 5% level of significance. The tabulated value for  $n=34-1$  i.e. 33 Degree of freedom was 33 is that 2.042. The calculated value i.e. 11.566 was much higher than the tabulated value at 5% level of significance. For overall knowledge score of subjects which was statically acceptable level of significance.

Hence it was statistically interpreted that the Lecture cum Demonstration about knowledge regarding Cranial Nerve Examination among The Basic B.Sc. Nursing 3<sup>rd</sup> year students in selected S.S.T.C.O.N. Yavatmal was effective.

The fourth objective is to find the association between post test knowledge on Cranial Nerve Examination with selected demographic variables.

The findings are,

In the finding of the association of knowledge scores with the age in year, the tabulated ‘ $\chi^2$ ’ value was 7.815 (df=3) which is higher than the calculated ‘ $\chi^2$ ’ i.e.

3.242 at 5% level of significance. Also, the calculated ‘p’=0.356 which was higher than the acceptable level of significance i.e. ‘p’=0.05. Hence it is interpreted that the age in year is not Significant with their knowledge scores.

In the findings of the association of knowledge scores with the gender, the tabulated ‘ $\chi^2$ ’ value was 12.592 (df=6) which is higher than the calculated ‘ $\chi^2$ ’ i.e.

3.577 at 5% level of significance. Also, the calculated ‘p’=0.734 which was higher than the acceptable level of significance i.e. ‘p’=0.05. Hence it is interpreted that the genders not Significant with their knowledge scores.

In the findings of the association of knowledge scores with the religion, the tabulated ‘ $\chi^2$ ’ value was 16.919 (df=9) which is higher than the calculated ‘ $\chi^2$ ’ i.e.

6.536 at 5% level of significance. Also, the calculated ‘p’=0.685 which was higher than the acceptable level of significance i.e. ‘p’=0.05. Hence it is interpreted that the religions not Significant with their knowledge scores.

In the findings of the association of knowledge scores with Previous knowledge, the tabulated ‘ $\chi^2$ ’ value was 12.592 (df=6) which is higher than the calculated ‘ $\chi^2$ ’ i.e. 7.784 at 5% level of significance. Also, the calculated ‘p’=0.254 which was higher than the acceptable level of significance i.e. ‘p’=0.05. Hence it is interpreted that Previous knowledge is not Significant with their knowledge scores.

## SUMMARY:-

The investigator has selected this study keeping in mind the necessity to address this situation and therefore the purposes of the study was conducted to find out the effectiveness of Lecture cum Demonstration on Cranial Nerve Examination among basic BSc Nursing 3<sup>rd</sup> year student in selected Nursing College.

The study is deal with the analysis data collected from 40 students with 20 questionnaire.

Score	Excellent	Good	Average	Poor
Pre-test	2.9%	47.1%	47.1%	2.9%
Post-test	79.4%	20.65	00	00

## CONCLUSION:-

After the detailed analysis, this study leads to the following conclusion Lecture cum Demonstration on Cranial Nerve Examination among the Basic BSc Nursing 3<sup>rd</sup> year student.

So, it was concluded that the written prepared material by the investigation in the form of Lecture cum Demonstration helps the student to improve their knowledge regarding Cranial Nerve Examination.

## IMPLICATIONS OF THE STUDY:-

The findings of the study have implication in Nursing Service, Nursing Education, Nursing Administration and Nursing Research.

### ❖ Implications In Nursing Service:

- This study emphasizes nurses to impart health knowledge regarding the Cranial Nerve Examination to the Nursing Students while practicing.
- Nurses can conduct programmes on Cranial Nerve Examination and its importance.
- Nurses can also conduct the campaign regarding various complication of Cranial Nerve damages to educate the people.

### ❖ Implications In Nursing Education

- As a nurse educator, there are various opportunities for nursing professionals to educate the students regarding Cranial Nerve Examination.
- This study adds to the nursing knowledge as it provides information regarding Cranial Nerve Examination.

### ❖ Implications In Nursing Administration

- Nursing administrators in the hospital can conduct the education programmes for the nursing students to improve their knowledge regarding Cranial Nerve Examination.
- Nursing administrators can organize staff development programmes for nurses to update their knowledge regarding Cranial Nerve Examination.

### ❖ Implications In Nursing Research:

- This study would help the researcher to develop appropriate teaching tools for educating the subjects regarding Cranial Nerve Examination.

## SUGGESTIONS

- The researchers suggest that some videos related to the Cranial Nerve Examination should be displayed so that students understand about Cranial Nerve Examination more effectively.

**RECOMMENDATIONS:-**

1. The similar study can be conducted by using other teaching methods such as video assisted teaching.
2. The study can be carried out on a large scale and in various settings, so that findings can be generalized to a large population.
3. Such study can also be carried out to find out the effect of Nursing interventions.

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