



## A STUDY TO EVALUATE THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING SENSORY STIMULATION IN UNCONSCIOUS PATIENTS AMONG STAFF NURSES IN SELECTED HOSPITALS.

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### ABSTRACT

**Aims:** The aim of this study was 1) to assess the pre test knowledge score regarding sensory stimulation in unconscious patients among staff nurses. 2) To administer Structured Teaching Programme on knowledge regarding sensory stimulation in unconscious patients for staff nurses in selected hospitals. 3) To assess the post test knowledge score regarding sensory stimulation in unconscious patients among staff nurses. 4) To evaluate the effectiveness of structured teaching programme among staff nurses regarding sensory stimulation in unconscious patients. 5) To determine the association between pretest knowledge score and selected demographic variables. **Material and methods:** Quantitative research approach with pre experimental one group pre test post test design was used for study. Total 60 staff nurses was selected by non probability convenient sampling technique. Self structured knowledge questionnaire was used for data collection. Validity and reliability was checked by experts. Pilot study was conducted with 10% of samples. Analysis done with the pre test knowledge score of antenatal mothers by using descriptive and inferential statistic. **Result:** majority 25(41.67%) of subject were In the age group of 21-25 years, 24(40%) were in the age group of 26-30 years, 5(8%) were of 31-35 years and 6(10%) were belongs to the age group of 36 year and Above. Majority 28(46.67%) had average knowledge regarding sensory stimulation, 23(38.33%) had Poor knowledge regarding sensory stimulation and only 9(15%) had good knowledge regarding sensory stimulation. **Conclusion:** this study reveals mean pre test knowledge score is 14.98 and the mean post test knowledge score is 18.48. The calculated 't' value is 6.74 is greater than tabulated value 2.00 at 0.5 level of significance. Analysis also reveals that there is association of knowledge score with Age, Educational status & work experience of staff nurses. Hence it is statistically interpreted that the structured teaching programme is effective as a teaching strategy.

### KEYWORDS :

#### INTRODUCTION

Health is the level of functional or metabolic efficiency of a living being. In humans, it is the general condition of a person's mind, body and spirit, to get aware of their surroundings<sup>1</sup>

Consciousness is the quality or state of being aware of an external object or something within oneself but unconscious is a condition of being unaware of one surroundings, as in sleep, or of being unresponsive to stimulation s.<sup>2</sup>

Consciousness and coma exist as opposite of spectrum, full consciousness is a state awareness and ability to respond optimally to ones environment. Coma is the opposite, a state of total absence of awareness and ability to respond, even when stimulated. Unconsciousness is an abnormal state in which the patient is unknown of self or environment.<sup>3</sup> Unconsciousness is an abnormal state resulting from disturbance of sensory perception found in different disease condition in which patient is not aware of physical and physiological need and he/she not aware of what is happening around them. It may be momentary or prolonged to days or months. Clinically the patient who does not respond to the spoken word is unconscious.<sup>4</sup>

#### BACKGROUND OF THE STUDY

An experimental study was conducted by Mandeep, Naveen chitkara, Sandeep Goel (2013) et al. to find out efficacy and benefits of early intervention of coma arousal therapy on patients with low GCS after traumatic head injury. A total of 60 patients with traumatic head injury were randomly selected. Both experimental group and control group had patients each. Patients in experiment group were given coma arousal therapy while in control group did not receive any coma arousal therapy. Coma recovery scale (CRS) was assessed before and after 1 week and 2 week of protocol. The result of this study was coma arousal therapy has significant effect on CRS in traumatic brain injury patients when compared to the patients who did not receive coma arousal therapy.<sup>5</sup>

#### NEED OF THE STUDY

A quasi experimental study was conducted in U.S.A, 2003 with sample size of patients and the Sensory stimulation programme was given to patients each day for up to 7days. The GCS scores were recorded as pre-test and post-test. The results showed that improvement was demonstrated in participants who receive auditory sensory stimulation. Hence it was concluded that sensory stimulation is effective in the recovery of unconscious patients.<sup>6</sup>

Considering the above facts and review of literature, investigator felt that sensory stimulation will improve the level of consciousness among unconscious patients and it is a suitable and affordable method to improve the conscious level in unconscious patients. As a student as well as staff nurse, the investigator felt that, the staff nurses can do more for unconscious patients during hospitalization. In the view of above need, the investigator has taken the study to provide the staff nurses with adequate knowledge regarding sensory stimulation in unconscious patients.

#### OBJECTIVE OF THE STUDY

##### Primary objective:

To assess the effectiveness of planned teaching programme on knowledge regarding sensory stimulation in unconscious patients among staff nurses.

##### Secondary objective:

1. To assess the pre test knowledge score regarding sensory stimulation in unconscious patients among staff nurses.
2. To administer Structured Teaching Programme on knowledge regarding sensory stimulation in unconscious patients for staff nurses in selected hospitals.
3. To assess the post test knowledge score regarding sensory stimulation in unconscious patients among staff nurses.
4. To evaluate the effectiveness of structured teaching programme among staff nurses regarding sensory stimulation in unconscious patients.

5. To determine the association between pretest knowledge score and selected demographic variables.

**HYPOTHESIS**

Hypothesis will be tested at 0.05 level of significance.  
**H1:** There is significant difference between pre-test and post-test knowledge regarding sensory stimulation among staff nurses.

**H2:** There is a significant association between the pre-test knowledge score and selected demographic variables among staff nurses.

**ETHICAL ASPECTS**

- The study will be approved by ethical and research committee.
- The formal permission will be obtained from the hospital authority.
- The informed consent will be taken from the staff nurses.
- The Consent will be obtained from concerned subjects and authority of institution.
- Privacy of subjects, Confidentiality and Anonymity of the data will be guarded.
- Scientific objectivity of the study will be maintained with honesty and impartiality.

**CONCEPTUAL FRAMEWORK**

The conceptual framework of the present study was developed by the investigator based on the Bertalanffy General System Theory.

**METHODOLOGY**

**Research Approach**  
 Quantitative approach

**Research Design**  
 Quasi experimental one group Pre-test Post-test design

**Setting**  
 Selected hospitals.

**Duration of Study**  
 1. Study was completed in 18 months.  
 2. Data collection was completed in 6 weeks.

**SAMPLING CRITERIA:  
 INCLUSIVE CRITERIA**

- Staff nurses who are;
- Present at the time of data collection.
  - Willing to participate in the study.
  - Able to speak, understand, read and write Marathi or English.

**EXCLUSION CRITERIA:**

- Staff nurses who are;
- Sick at the time of data collection.
  - Not involved in direct patient care.

**VARIABLES**

**Independent variable**  
 structured teaching program on sensory stimulation in unconscious patients.

**Dependent variable**  
 Knowledge of the staff nurses on sensory stimulation unconscious patients.

**Demographic variables:**  
 Age, gender, religion, educational status, monthly family income, area of work, work experience, previous exposure, source of Previous information.

**Population**  
 All staff nurses

**Target population**  
 All staff nurses in selected hospitals.

**Accessible population**  
 All staff nurses in selected hospitals and are available at the time of data collection.

**TOOLS**

**Development Of Tool**  
 The following steps were adopted by the investigator to develop a sound instrument for data collection:

1. Extensive review of literature.
2. Opinion and suggestions were taken from experts.
3. Preparation of blue print.
4. Description of the tool.
5. Preparation of structured teaching programme.
6. Content validity.
7. Reliability

**Description of tools**

Structured questionnaire consist of two section  
**Part I** – This section consists of 7 items seeking information about demographic proforma about staff nurses such as age, gender, educational status, working experience, area of work, previous knowledge and source of information.  
**Part II** – This section consists of structured knowledge questionnaire regarding sensory stimulation in unconscious patients to assess the knowledge of staff nurses. It consists of 30 items. Each item was multiple choices with 4 responses

**Scoring**

Each correct answer is given a score of one and wrong answers a score of zero. The maximum score was 30. To interpret the knowledge the scores were distributed as follows.

- Inadequate knowledge - <50%
- Moderately adequate knowledge - 50-75%
- Adequate knowledge - > 75 %

**RESULT**

**Table no 2: shows the frequency and percentage distribution of demographic variables.**

Sr. No.	VARIABLE	GROUP	Frequency N	Percentage %
1	Age	21-25	25	41.67
		26-30	24	40.00
		31-35	5	8.33
		36 and above	6	10.00
2	Gender	Male	24	40.00
		Female	36	60.00
3	Religion	Hindu	21	35.00
		Muslim	1	1.67
		Christian	11	18.33
		Others	27	45.00
4	Education status	Diploma	42	70.00
		Graduate	14	23.33
		Post Graduate	4	6.67
5	Monthly income	10000-20000	32	53.33
		21000-30000	25	41.67
		31000-40000	2	3.33
		> 40000	1	1.67
6	Area of work	Medical and surgical ward	29	48.33
		OPD and Casualty	5	8.33
		ICU	26	43.33
7	Work experience	0-3.	36	60.00
		4-7.	20	33.33
		8-11.	0	0.00
		12 and above	4	6.67

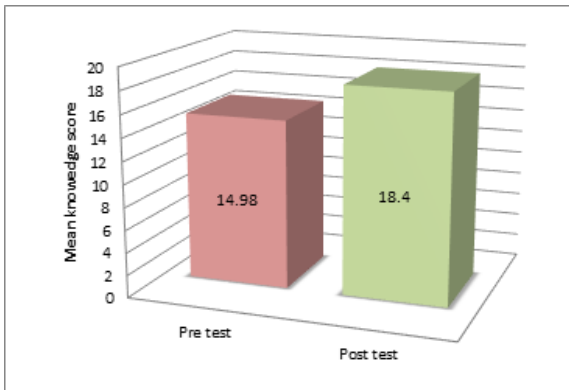
8	previous exposure	Yes	27	45.00
		No	33	55.00
9	source of previous information	Mass Media	8	29.63
		Seminar and workshop	2	7.41
		Academic Education	9	33.33
		Others	8	29.63

**Table No. 2: The Table Showing Comparison Of Pre Test And Post Test Grading Score**

**N=60**

Knowledge	Level of knowledge regarding sensory stimulation	Score	Pre Test		Post Test	
			Frequency N	Percentage %	Frequency N	Percentage %
	Poor	0-10	23	38.33	11	18.33
	Average	11-20	28	46.67	18	30.00
	Good	21-30	9	15.00	31	51.67

**Fig 1: Bar diagram representing effectiveness of structured teaching programme in knowledge score of pre test and post test of staff nurses regarding sensory stimulation in unconscious patients**



Pre- test knowledge score with mean 14.98 post test knowledge scores with mean 18.40. The calculated t' value is 6.74 is greater than tabulated value 2.00 at 0.5 level of significance. Analysis also reveals that there is association of knowledge score with Age, Educational status & work experience of staff nurses.

Thus it was concludes that Hence it is statistically interpreted that the structured teaching programme on knowledge regarding sensory stimulation in unconscious patients among staff nurses was effective as a teaching strategy.

**LIMITATIONS**

1. The findings of the study could not be generalized in view of small size sample and limited area of setting.
2. The findings of the study were limited to 60 staff nurses is selected hospitals.
3. The attempt was not made to follow up to measure the retention of knowledge after post-test.

**RECOMMENDATIONS**

1. A similar study can be conducted on larger sample for wider generalizations.
2. A study can be done to assess the knowledge regarding sensory stimulations in unconscious patients
3. A experimental study can be conducted to assess the effectiveness of sensory stimulation in unconscious patients.
4. An explorative study should be carried out the various problems

**REFERENCES**

1. Wikipedia [online]. 2012 Nov 19[cited 2016 Nov 22]; Available from: URL:..http://en.wikipedia.org/wiki/Health
2. Smeltzer SC, Bare"s B. Branner and Suddarth"s text book of Medical Surgical Nursing, 10th ed., p.1851-1852.
3. I clement, "Text book on neurological and neurosurgical nursing" first edition,2012,p.730-31
4. Ignatavicius DD, Workman ML, Mishler MA. Medical Surgical Nursing, 2nd ed., W.B. Saunders 1995.
5. Mandeep, Naveen chitkara, Sandeep Goel et al.Effectiveness of early intervention of coma arousal therapy in traumatic head injury patients. [online] international journal of head and neck surgery.2013:137-142
6. Urhenjaphol P,Jitpanya C, Khaorophum S. Effects of the sensory stimulation programme on recovery of unconscious patients with traumatic brain injury,JNeuronurs 2009jun;41(3):10-6