



**A STUDY TO THE ASSESS EFFECTIVENESS OF PLANNED TEACHING PROGRAMME ON GLASGOW COMA SCALE IN TERMS OF KNOWLEDGE AND ATTITUDE AMONG STAFF NURSES WORKING IN SHREE SARDAR SMARAK HOSPITAL, BARDOLI”**

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**ABSTRACT**

**Introduction:**In India every year approximately 3.2 million admissions occur in ICU out of which 80% patients are in comatose stage with mortality of 48000 are Reported. It is essential for Nurses to have adequate knowledge on GCS scale while caring for unconscious patients. Aim of the study is to assess knowledge and attitude of staff nurses regarding Glasgow coma scale before and after planned teaching programme.

**Methods:** Using a Quasi experimental design 30 staff nurse was selected using simple random sampling technique from Shree sardar Smarak hospital. Knowledge was Assessed using structured knowledge questionnaire and attitude was assessed with 5 point Likert scale.

**Results:** In Analysis the mean Post-test Knowledge score was significant at 0.05 level [P<0.05] .Post test attitude score was significant at 0.05 level [P<0.05]. Knowledge and attitude was positively correlated [r = 0.7]. Hence it was proved that the planned teaching programme was effective.

**Discussion:** The study result concluded, that the planned teaching was effective in improving the knowledge and attitude of staff nurses under study. The findings can Not be generalized since the sample size was small.

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**INTRODUCTION**

The Glasgow coma scale is a tool medical professionals use to objectively evaluate the degree to which the persons is conscious or comatose. Also referred to as the “Glasgow coma score “ it operates on a scale of “3” to “15” in which progressively higher scores indicate higher level of consciousness<sup>1</sup>. External stimuli are given to a patient, and the tester rates 3 neurological aspects of the patients response: eye opening, limb movement, and vocalization. Glasgow coma scale is an important guide for predicting outcomes. Like the NIHSS, the Glasgow coma scale is not a diagnostic tool, and it does not replace the neurological exam.

The Glasgow coma scale has been a part of neurologic practice for 35 years and has proved to be an objective and reproducible way to describe a patient’s level of consciousness and arousal. Administering the scale takes 3-5 minutes and requires no special equipment.

Graham Teasdale and Bryan J Jennett first developed the Glasgow coma scale in 1974. At the University of Glasgow, this neurosurgery professor continues to develop important work in the field of head trauma, publishing management of head injuries in 1981<sup>2</sup>.

The assessment of comatose patient is an important part of critical care. Unfortunately, there is no objective measure of coma like temperature or blood pressure. Thus, so far the level of coma has to rely on clinical scores. The Glasgow coma scale, originally design for patient with head trauma, has become the most widely used scoring system for patient with an altered level of consciousness in the ICU. Important function of Glasgow coma scale in consistence inter observer reliability, concern over the predictive value in brain injury patient undergoing modern neuro intensive care, the impossibility of assessing the verbal score in intubated patient, and the exclusion of brains stem reflexes. Over the past decade, a variety of alternative scoring system have been developed, although none of them reach wide spread acceptance.

It is very important that every nurse working in area needing critical care such as high dependency units has enough knowledge to assess the intervene appropriately and she/he should also be able to communicate any change in patients condition for multi-disciplinary intervention

**Objective**

- ✓ To Assess The Knowledge Regarding Glasgow Coma Scale Among Staff Nurse Before And After Of Structured Teaching Program.

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- ✓ To Assess The Attitude Regarding Glasgow Coma Scale Among Staff Nurse Before And After Structured Teaching Program.
- ✓ To Compare Pre And Post Test Knowledge And Attitude Score Among Staff Nurse Before And After Structured Teaching Program.
- ✓ To Find Out Correlation Between Post-Test Knowledge And Attitude Score Among The Staff Nurses.

**Hypothesis**

- H1:**H1**-Their Will Be Significant Association Between Mean Pre-Test And Post Test Knowledge Score Of Staff Nurse Regarding Glass Glow Coma Scale At The Level  $P < 0.05$
- H2: **H2**- Their Will Be A Significant Association Between Mean Pre-Test And Post-Test Attitude Score Of Staff Nurse Regarding Glass Glow Coma Scale At The Level  $P < 0.05$

**METHODS**

**Approach&Design:** Quasi Experimental Design Non Randomized Control Group Design

**Setting &Population:** Shree Sardar Smark Hospital , Bardoli Staff Nurses Working In Hospital In Surat

**Sample, Sample Size:** Staff Nurse Working In Sardar Smark Hospital Who Fulfill The Inclusion Criteria 30

**Sample Technique:** Probability Simple Random Sampling Technique.

**Description of tool**

**Section 1:** Demographic data

**Section 2:** 30 questions to measure the knowledge level of staff nurses regarding Glasgow coma scale.

**Section 3:** Likert scale to measure the attitude level of staff nurse regarding Glasgow coma scale.

**Section 1: Demographic Data**

The section contain 4 items for obtaining the information regarding in staff nurses Age, Educational qualification, Present working department, Experience of working, Teaching Glasgow coma scale

**Section 2: Questionnaires**

This section consisted of 30 items of multiple choice questions on following areas.

- Introduction – 5
- Definition – 1
- Indication – 5
- Uses- 3
- Eye response – 4
- Verbal response – 6
- Motor response – 3
- Advantages – 2
- Disadvantages – 1

**Section 3: Likert Scale**

This section consisted of 10 statement and their alternative responses.

**RESULT**

**Organization of the Findings**

**The Analysis and Interpretation of the Data Are Organized Under the Following Heading**

**Section A:** Findings Related To Analysis Of Demographic Variables Of Staff Nurses.

**Section B:** Findings Related To Assess Knowledge Of Staff Nurses Regarding Glasgow Coma Scale.

**Section C:** Findings Related To Assess Attitude Of Staff Nurses Regarding Glasgow Coma Scale.

**Section D:** Findings Related To Association Between The Post Test Knowledge And Post Test Attitude Score.

**Section A: Findings Related to Analysis of Demographic Variables of Staff Nurses**

**Table 1** Frequency and Percentage Distribution of the Staff Nurses According To Characteristics

Sr No.	Variables	Frequency	Percentage (%)
1	<b>Age In Years</b>		
	• 20-30 Years	12	40%
	• 30-40 Years	10	33.33%
	• 40-50 Years	04	13.33%
2	• 50 And Above	04	13.33%
	<b>Educational Qualification</b>	23	76.66%
	• General Nursing And Midwifery	04	13.33%
	• Post Basic B. SC Nursing	02	6.66%
3	• Basic B. SC Nursing	01	3.33%
	• If Any Medical Or Paramedical Person	01	3.33%
	<b>Present Working Department</b>	13	43.33%
	• Emergency And General ICU	03	10%
4	• Neonatal ICU	10	33.33%
	• Male And Female Ward	04	13.33%
	• Others	04	13.33%
	<b>Experience Of Working</b>		
5	• 0-2 Years	10	33.33%
	• 3-5 Years	10	33.33%
	• 6-8 Years	03	10%
	• More Than 8 Years	07	23.33%
5	<b>Taken Any Training On Neurological Assessment?</b>		
	• Yes	18	10%
	• No	12	23.33%

**Section B: Findings Related To Assess Knowledge Of Staff Nurses Regarding Glasgow Coma Scale.**

**Table 2** Mean, Mean Difference, Standard Deviation (SD) and 't' Test Value of Pre Test And Post Test Knowledge Scores of Samples on Glasgow coma scale.

(N=30)

Knowledge	Mean	Mean difference	SD	SE	calculated 't' value	tabulated 't' value
pre-test	10.36	10.47	4.39	0.51	20.5	2.04
post test	20.83		3.02			

The mean pre-test knowledge score was 10.36 and the mean post-test knowledge score was 20.83 with the mean difference

of 10.47. The table also shows that the Standard Deviation of Pre-test knowledge score was 4.39 and the post-test was 3.02. It revealed that calculated 't' value (t =20.5) was greater than tabulated 't' value (t =2.04) which was statistically proved. This indicated that the difference obtained in the mean pre-test and post-test knowledge score was a real difference and not by a chance. So it was concluded that the Planned Teaching Programme on Glasgow coma scale was effective in terms of knowledge of staff nurses working in Shree Sardar Smark hospital.

**Section C: Findings Related To Assess Attitude Of Staff Nurses Regarding Glasgow Coma Scale.**

Table 3 Mean, Mean Difference, Standard Deviation (SD), Standard Error of Mean and "t" value of Pre-test and Post-test Attitude scores of the sample on Glasgow coma scale.

Attitude test	Mean	Mean difference	SD	SE	calculated 't' value	tabulated 't' value
pre-test	30.93		3.65			
post test	40.8	9.87	1.84	0.51	13.43	2.04

The mean pre-test Attitude score was 30.93 and the mean post-test attitude score was 40.8 with the mean difference of 9.87. The table also shows that the Standard Deviation of Pre-test attitude score was 3.65 and the post-test was 1.84. The calculated 't' was 13.43 and the tabulated 't' was 2.04 at 0.05 level significance. It revealed that calculated 't' value (t =13.43) was greater than tabulated 't' value (t =2.04) which was statistically proved. This indicated that the difference obtained in the mean pre-test and post-test Attitude score was a real difference and not by a chance. So it was concluded that the Planned Teaching Programme on Glasgow coma scale in terms of Attitude among staff nurses working in Shree Sardar Smarak hospital.

**Section D: Findings Related To Association Between The Post Test Knowledge And Post Test Attitude Score.**

Table 4 Correlation between the Posttest knowledge mean score and Posttest attitude mean score of staff nurses working in Shree Sardar Smarak Hospoital, Bardoli regarding Glasgow coma scale.

karl - pearson's corolation co-efficient ( r )				
Post-Test Knowledge mean score (x)	Post-Test Attitude mean score (y)	Number of samples (n)	co-relation co-efficient ( r )	Remark
20.83	40.8	30	0.7	significant positive co-relation at 0.05 level of significance

Table shows the correlation between the post test knowledge and posttest attitude score of staff nurses working in Shree Sardar Smarak Hospital, Bardoli. regarding Glasgow coma scale. The correlation coefficient ( r ) obtain by using karl pearson formula is 0.7. it suggest of a significant moderate correlation between the post test knowledge score and posttest attitude score of the sample which is statistically proved and by chance.

**DISCUSSION**

The study intends to find out the effectiveness of planned teaching programme as a mean to improve knowledge of the students. The overall experience was a satisfying one. The investigators found that the planned teaching programme is an effective teaching strategy to improve the knowledge of the student. The findings of the present study have been discussed with the objectives, conclusion, findings and the result of the similar study.

**Section-A:** Discussion of the Demographic Variables.

**Majority 12(40%) of the sample were of age group of 20-30 years.**

1. Majority 23(76.66%) of the sample were having educational qualification of general midwifery nursing.
2. Majority 13(43.33%) of the sample were presently working in emergency and general ICU department.
3. Majority 10(33.33%) of the sample were having 0-2 year and 3-5 years of experience of working .
4. Majority 18(60%) of the sample have taken prior training on neurological training.

**Section-B:** Knowledge of Staff Nurses Regarding Glasgow coma scale

It was found that the mean pre test knowledge score was (10.36) and mean post test knowledge score was (20.83) with mean difference of (10.47) so it suggest that the planned teaching programme is effective.

**Section-C:** Attitude of Staff Nurses Regarding Glasgow coma scale.

It was found that the mean pre- test attitude score was (30.93) and the mean post-test attitude score was (40.8) with mean difference of (9.87).so it suggest that the planned teaching programme is effective.

**Section-D:** Association Between mean Post test knowledge score and Post test attitude score.

The co-relation co-efficient ( r ) obtain by using karl pearson formula is (0.7).It Suggest Positive Association between post test knowledge and attitude.

**CONCLUSION**

The finding of the study showed that all 40% samples were in between 22 to 30 year. The post-test knowledge mean (10.47) standard deviation (3.02) were higher than the pre-test knowledge mean (9.87), standard deviation (4.39 ).

The comparison of the pre-test knowledge score showed that there was significant gain in knowledge score of staff nurses after conduction of planned teaching programme at 0.05 level, this study shows that planned teaching programme was effective.

The study finding concluded that staff nurses had adequate knowledge regarding glassgow coma scale .the planned teaching progamme had great potential for accelerating the knowledge and attitude regarding Glasgow coma scale.

**Recommendations**

Keeping in view the findings of the present study, the following recommendations have been made for the study.

1. Similar study can be replicate on a large sample.
2. A study can be conducted with control group.
3. The comprehensive study may be conducted to find out the effectiveness between planned teaching programme regarding the same topic.
4. A correlational study can be conducted to assess the knowledge and attitude of the staff nurses.
5. The longitudinal study can be done using post-test after one week to see the retention of knowledge.

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