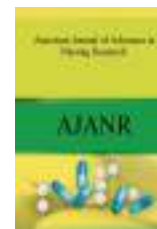




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### A STUDY TO ASSESS THE KNOWLEDGE AND PRACTICE OF STAFF NURSES REGARDING CARE OF UNCONSCIOUS PATIENTS AT PRIVATE HOSPITAL, GUNTUR.

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#### ABSTRACT

The primary goal of caring an unconscious client is to maintain a patent airway and to promote recovery and to prevent complications. It is considered as one the most important aspect of critical care nurses. Maintaining airway, providing nutritious feedings, changing positions, maintaining normal body temperature, providing eye care, mouth care, assessing skin, preventing pressure ulcer, maintain the bowel and bladder functions, safe administration of medications, preventing falls and accurate documentation of care are the important aspects of care in an unconsciousness. The study was conducted among staff nurses with different qualifications and a self administered questionnaire tool was given to nurses. Based on the findings it can be concluded that a considerable number of the staff nurses knows the complete care aspects of an unconscious patient, in relation to the qualification, highly qualified nurses shown good knowledge and practice levels as compared to low qualification. It was highlighted from this study that nurses working in neuro intensive care unit have shown the better quality of care as compared to nurses working in general wards and it was stressed that exposure to neuro wards improves knowledge regarding care of an unconscious clients in clinical settings.

#### INTRODUCTION

Unconsciousness is defined as being unaware of self, stimuli and environment. More than any other clients, clients who are comatose or confused need to be cared for in a holistic manner. All aspects of physiologic and psychological function need to be addressed. Even if the clients cannot interact with their surroundings the nurse must care for them in a respectful and dignified manner. It is important for family members to see that their loved ones are spoken to and cared for in a professional and caring way.

Unconsciousness can be brief, lasting for a few seconds to minutes or sustained lasting for an hour or longer. To produce unconsciousness, a disorder must

Disrupt the ascending reticular activating system which extends the length of the brain stem and up to the thalamus.

- Significantly disrupt the function of both cerebral hemispheres.
- Metabolically depress overall brain function, as in a drug overdose [1].

Frequent, systematic and objective nursing assessment of the comatose patient including neurological status is essential. Some observations are important for comparison and to facilitate prompt reporting of even

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subtle changes in status. One of the nurse's most challenging task is to provide care for an unconscious patient. This task requires skill, sound judgement and the ability to make assessments and solve problem using only objective information. The neural mechanism that make awareness or consciousness possible are not known. Many parts of the nervous system work together to determine the nature of awareness. Consciousness is depend on the Reticular Activating System (RAS). It is the impulses from the RAS that serve as an alerting system and maintain activity. When there is an insult to the RAS, the state of consciousness is altered [2,3 & 4].

It is a condition of being unaware of one's surrounding, as in sleep or of being unresponsive to stimulation. Unconsciousness is lack of response to sensory stimuli as a result of hypoxia, resulting from respiratory insufficiency, shock, pathologic abnormalities such as a trauma, seizures, CVA, brain tumour, metabolic or chemical brain depressants such as drugs, poisoning, ketones, electrolyte imbalances etc..

Nursing itself is the autonomous and collaborative care of individuals of any age, care of the families, and communities, sick or well. It also includes the activities like promoting health, preventing illness and the complete care of ill, disabled and dying people. The qualities of a professional nurse are comprehensive caring, good communication, honesty, and respect for people, self-awareness, empathy, good attention, sympathy, enthusiasm, understanding, effective problem-solving skills, respect, desire to learn and responsibility.

One of the nurse's most challenging task is to provide care for an unconscious patient. This task requires skill, sound judgement, the ability to make assessment and solve problems using only objective information. As the reflexes were impaired in an unconscious patient, the quality of nursing care plays an important role, it means the life and death for the client and family attendants. The nurse must assume responsibility for the patient until the basic reflexes like cough, blinking and swallowing comes back indicates the patient turned to consciousness and oriented. Thus, the major nursing goal is to compensate for the absence of protective reflexes.

Consciousness is a function of the reticular formation (RF), which is a part of the brain stem. The RAS Reticular Activating System maintains the arousal status of an individual. Awareness is the result of the combine's activity of the RF, RAS and higher cortical function. There are two stages in altered or impaired consciousness named as acute and chronic. Acute states are potentially reversible, whereas chronic states indicate underlying brain damage and hence are irreversible. Acute loss of consciousness are caused by some factors like metabolic abnormalities like hyponatremia, hypernatremia, hypoglycaemia, hyperglycemia, acidosis

etc.. There are other many different causes of unconsciousness some of them were considered as primary and others as secondary causes [5, 6 & 7].

The categorisation of the different stages of coma is not universally accepted. The difference between each statement lies in the degree and presence of response to painful stimuli. However, semi-coma and deep coma terms were still used in clinical settings. A variety of scales have been devised to describe patient's level of consciousness. The GCS has been used as prognostic device during immediate assessment, It is a quick, objective and easily interpreted mode of neurological assessment.

Unconscious patient require skilled emergency management. As a patient starts to become unconscious he or she loses of his or her ability to maintain a safe environment. Thus, in relation to consciousness, the nurse has an essential role in the assessment of the CNS by GCS, monitoring vital signs, pupillary reaction and limb movements. The CABD (Circulation, Airway, Breathing and Disability) approach to resuscitation should be adopted. The unconscious patient is a medical emergency, the nurse needs to work closely with the medical team to ensure that the right pathways of medical management are applied appropriately. Respiratory function maintenance and promoting adequate ventilation are nursing priorities. Assessment of the mouth and providing mouth care is an important aspect of nursing care while caring an unconscious client. Maintenance of patent airway is the other important aspect, removing dentures (if present) must be considered as routine activity in clients who were comatose, failure of doing so aspiration. Positioning the unconscious client is very important and will facilitate the drainage of secretions. Lateral recumbent position is advised with the head of the bed slightly tilted upwards, about 10-30 degrees to maintain a patent airway. Nutrition and hydration is a fundamental human need and yet evidence suggests that up to 40 percent of hospital patients remain malnourished. The delivery of nutritional requirements is best achieved enter ally as the parenteral route has the disadvantage of expense, increased risk of infection from IV cannulation. Enteral feeding can be administered in a variety of ways and the most appropriate means needs to be decided following assessment of the unconscious patient [8].

Unconsciousness is a broad spectrum from momentary loss of consciousness as seen with fainting to prolonged coma that may last weeks, months or even years. The immediate and on-going care of client is similar whatever may be the underlying cause. These patients have no control over themselves or their environment and hence are highly dependent on nurse. The care is described as holistic in nature which includes brushing, combing, grooming, eye care, back care, bathing, dressing, foot care,



special needs like nail care, cannula care, catheter care, enema care etc.. Apart from these routine schedules patient also requires time to time administration of medications or intra venous fluids ordered by physician. There is great need of monitoring client's neurological status, cardiac status and renal parameters regularly. ABG is advised based on hospital protocol or need of the patient [9].

The skills required to provide care for an unconscious patient are not in a routine fashion and are not specific to critical care and theatres as unconscious patients are nursed in a variety of clinical settings. However, with a good knowledge base to initiate the assessment, diagnosing, planning and evaluating can promote confidence in the care of all patients. Unconsciousness can be assessed by using Glasgow coma scale includes three aspects having different score categories where 15 indicates full consciousness, 8 or less is semi-comatose state and 13-15 indicates mild unconsciousness. Patients who have had an episode of altered awareness and are subsequently brought to the hospital for evaluation are common amounting to more than 6 % of all emergency room admissions [10].

#### **Need for the study:**

The unconscious patient is a medical emergency which can challenge the diagnostic and management skills of any clinician. A systematic and logical approach is necessary to make the correct diagnosis; the broad diagnostic categories being neurological, metabolic, diffuse physiological dysfunction and functional. Even when the diagnosis is not immediately clear, appropriate measures to resuscitate, stabilize and support an unconscious patient must be performed rapidly. The key components in the assessment and management of a patient, namely history, examination, investigation and treatment, are performed in parallel, not sequentially. Unless the cause of unconsciousness is immediately obvious and reversible, help from senior and critical care colleagues will be necessary. In particular, senior help will be needed to make difficult management decisions in patients with a poor prognosis [11].

Unconsciousness can be brief lasting for a few seconds to minutes or sustained, lasting for an hour or longer. As the patient is unaware of himself and his environment there are more chances of complications like airway obstruction, aspiration and respiratory tract infections are the common cause of death in unconscious patient. These patients are potential for injury, pressure sores and fluid volume deficit. Alterations in urinary elimination lead to urinary incontinence or retention. Bowel functions becomes abnormal leads to constipation. The comprehensive nursing care starts at the time of admission and continues until the regain of normal

function by client. Important nursing care for an unconscious client includes assessment, immediate management, airway maintenance, and maintenance of skin integrity, nutritional maintenance, mouth care, bowel and bladder elimination, care of all lines, providing comfortable bed, position, eye care, back care, safe administration of medications, hygienic skin care, prevention of infections and complications, preventing falls and associated injuries, foot care, protection of client rights, psychological assistance to client and the family and accurate documentation of care [12 & 13].

Nurses have their own problems such as over work, understaffed, double duties, lack of appreciation, low motivation, all these affects their attitude towards nursing and patient care. Inadequate physical structure for education and lack of clinical experiences to students leads to incompetent future staff. Number of nurses were increasing but the quality was deteriorating, hence development of skills and improving knowledge is necessary to improve the quality of care to unconscious clients [14].

#### **REVIEW OF LITERATURE**

**Literature review** is defined as scholarly paper, which includes the current knowledge including substantive findings, as well as theoretical and methodological contributions to a particular topic.

The immediate nursing care and assessment of the patient is complete and well presented as are the observations and the reason for the frequency in recording. Also the problem of markedly decreased gastric absorption, as seen in states where long term muscle relaxants have been used has been only briefly mentioned: this necessitates the intravenous use of high calories protein fat and vitamin solutions, and whereas this has only been mentioned there is a long discussion on the composition and technique of intra- gastric feeding. The care for a patient with tracheostomy including humidification is continuous and not just "for the first few days". Dealing with drug overdose it is good to see that presser drugs have little place in then treatment of hypertension, whereas in certain cases the use of sympathetic blocking drugs combined with maintenance of blood volumes have a useful function. The place of physiotherapy by nurses and physiotherapists both in the acute stage and during rehabilitation, has been stressed and to how much this determines the extent of return to normality of the patient.

Unconsciousness is defined as a sleeplike state in which the patient is unresponsive to self and the environment. It should be distinguished from the persistent vegetative state and locked-in syndrome. It is important to obtain a detailed history from the client and pupils reactive to light usually indicate metabolic or medical coma;



cerebellar infarction or haemorrhage is a notable exception.

A study conducted on the experience of a group of critical care nurses concerning verbal communication with critically ill patients. There is evidence that communication in critical care setting is not sufficiently implemented in practice. Inadequate nurse patient communications result in increased level of stress and anxiety. Verbal communication can help patients preserve their self dignity and self esteem, which in turn enhance their well being and optimism. Unconscious patient received less verbal communications and interactions than verbally responsive patients. Communication with unconscious patients in intensive care unit should not be viewed as only an interactive process, rather, it should be perceived as the means to give the information and support that such patients need [15].

In a study conducted by James E. Eckenhoff the patient who is unconscious from cerebral catastrophe must depend upon other to detect or anticipate his needs and to institute the appropriate measures to assure his recovery if the pathological insult can be overcome. Adequate pulmonary ventilation must be provided by ventilator of minute volume, by respiratory assistance if required, by tracheostomy if indicated [16].

A study was conducted to investigate the efficacy of eye care given to mechanically ventilated patients in an intensive care unit, revealed that it plays a greater role in unconscious clients. The study conducted with application of "Geliperm" eye drops to one eye and the other eye was treated as control eye. This study does provide evidence to support the need for eye care in critically ill patients [17]. A descriptive study was conducted in selected hospital in Mangalore to assess the knowledge of staff nurse regarding care of the unconscious patient with the sample of 60-80 nurses, the results showed that there was adequate knowledge of nurses regarding care of unconscious clients, but in certain areas like safety needs of unconsciousness, the nurses knowledge was found to be inadequate [18].

The unconscious patient presents a challenging emergency in the intensive care unit. Patient evaluation and treatment must occur simultaneously. After checking vital signs, deciding about cardiopulmonary resuscitation or intubation, an intravenous line must be established, blood samples collected and glucose and thiamine should be given. The physical and neurological examination should be performed in an efficient way and must consider the following eight points: best reaction to loud commands, best motor reaction to noxious stimuli, respiratory pattern, size and reactions of pupils, eye movements, corneal and blink reflex, meningismus, muscle tone and deep tendon reflexes. With this approach it is possible to formulate a working diagnosis, and the

appropriate diagnostic steps can be performed [19].

## CONCEPTUAL FRAMEWORK

Conceptual framework is defined as a *conceptual framework* is an analytical tool with several variations and contexts. In the present study Virginia Henderson basic human needs theory was used as conceptual framework. The present theory was also named as nursing need theory which was formerly developed by Virginia Henderson and was derived from her practice and education. The theory emphasizes the importance of increasing the patients independence. Her emphasis on basic human needs as the main focus of nursing care and that motive has led her to further theory development regarding the needs of the patient and how nursing can assist in meeting those needs.

The four major concepts addressed in the theory are the individual, environment, health and nursing. There are 14 component's based on human needs that make up the nursing activities.

1. Breath Normally
2. Eat & drink adequately
3. Eliminate body wastes by all avenues of elimination
4. Move and maintain a desirable position
5. Sleep and rest
6. Select suitable clothing : Dressing
7. Maintain Normal body temperature with-in the normal range by adjusting clothing or by modifying the environment.
8. Keep the body clean and well groomed and protect the integument.
9. Avoid dangers in the environment and avoid injuring others
10. Communicate with others in expressing emotions, needs, fears or opinions, worship according to one's faith
11. Work in such a way that there is a sense of accomplishments.
12. Play or participate in various forms of recreation.
13. Learn, discover or satisfy the curiosity that leads to normal development and health and use the available health facilities.

These components show a holistic approach to nursing that cover the physiological, psychological, spiritual and social aspects. Nurses need to stress the promotion of health and prevention of disease. Henderson explains in nature of nursing that the role of nurse is "to get inside the patient's skin and supplement his strength will or knowledge according to his needs." The nurse has the responsibility to assess the needs of the patient, help him or her to meet the health needs and provide an environment in which the patient can perform activity needed [20].

## Objectives of the study

1. To assess demographic profile of the selected



subjects.

2. To assess the knowledge of staff nurses about definition, causes, management and complications of unconsciousness.
3. To assess the practice levels of staff nurses regarding care of unconscious clients.
4. To find the association between knowledge and practice scores with the selected demographic variables.

### 3. METHODOLOGY

**Research Approach:** The research approach used for the present study was descriptive approach. Descriptive approach can be explained as a statement of affairs as they are at present with the researcher having no control over variable. Descriptive studies are closely associated with observational studies, but they are not limited with observational data collection method.

**Research design:** A Cross-sectional design was used for the present study. It is a type of observational study that analyses data from a population or a representative subset, at a specific point in time. Cross sectional study aim to provide data on the entire population under study. It may involve specific data collection including questions about the past, but they often rely on data originally collected for other purposes [21 & 22].

**Statement of the problem :** A study to assess the knowledge and practice of staff nurses regarding care of unconscious patients at private hospital., Guntur.

#### Operational Definitions :

- Knowledge : It refers to information and skills acquired through experience or education. The theory or practical understanding of a subject.
- Practice : The actual application or use an idea or method, as opposed to theories relating to it.
- Staff Nurse : It refers to an experienced nurse less senior than a sister or in charge nurse.
- Care : The provision of necessary assistance for maintenance or promotion of the health, welfare, maintenance and protection of someone.
- Unconsciousness : Being unaware and awake of and not responding to one's environment.
- Patient : A person needs medical supervision or assistance for temporary period of time.

#### Assumptions :

1. There will be poor knowledge among staff nurses regarding care of the unconscious patients among staff nurses
2. There will be poor practices among staff nurses regarding care of unconscious patient.

3. The knowledge and practice levels will be highly correlated to each other.

4. There will be significant association between the knowledge and practice scores with the selected demographic variables.

**Setting of the study:** The study was conducted in the private hospital at Guntur district.

**Population:** the target population was staff nurses.

**Sample:** sample comprised of staff nurses working at private hospital, Guntur district.

**Sample size:** sample size comprised of 150 staff nurses.

**Sampling technique:** Random sampling technique was used for this study.

#### Criteria for sample selection: Inclusion criteria

- Staff nurses who are available at the time of data collection
- Staff nurses who are willing to participate in the study
- Staff nurses who can read & write English

#### Exclusion criteria:

- Staff nurses who are not available at the time of data collection
- Staff nurses who are not willing to participate in the study

#### Tools & Techniques of data collection:

**Tool 1:** A questionnaire schedule on socio-demographic proforma which comprised of 8 items

- Age
- Sex
- Educational Qualification
- Years of experience
- Areas of exposure
- Working position
- Hours of work
- Attending CNE (Continuing Nursing Education)

**Tool 2:** Structured self administered knowledge questionnaire on care of the unconscious patients. It was prepared after the extensive literature review to assess the level of knowledge regarding care of unconscious clients among staff nurses. This tool consisted of 15 questions covering the following aspects.

- Definition of unconsciousness
- Causes of unconsciousness
- Stages of unconsciousness
- Signs & symptoms of unconsciousness
- Assessment of unconsciousness
- Immediate management of unconsciousness
- Nursing management of unconsciousness
- Complications of unconsciousness



**Scoring Key:**

Knowledge Level	Score	Percentage
Good	>7/15	Above 50 %
Average	6-7 / 15	40- 50 %
Poor	< 5/15	<40 %

*Tool 3* : Structured self-administered practice related questionnaire regarding care of unconscious clients. The tool consists of 25 questions.

**Scoring Key:**

Practice Level	Score	Percentage
Good	13/15	Above 50 %
Average	10-12 / 15	40- 50 %
Poor	<9/15	< 40 %

**Content Validity**

The content validity of an instrument was based on judgements. The entire tool was validated by 4 experts, including 2 nursing and 2 medical experts. After incorporating the suggestion according to expert's opinions, the tool was prepared. The tool was evaluated for its adequacy, comprehension, simplicity and relevance.

**Reliability of the tool** : The reliability was established by inter-rater technique refers to degree to which 2 raters or observers operating independently assigning the same ratings or values for an attribute, being measured or observed. The tool was administered simultaneously by 2 persons who were equally exposed to research.

**Pilot Study**: Formal permission was obtained from the Lalitha Super Specialities Hospital Pvt., Ltd, Guntur. 10 staff nurses were selected based on the inclusion criteria and then the investigators approached them for collecting the data.

**Plan for data Analysis**: A research always depends on proper analysis of the data. In the present study the statistics used were

- Frequency Distribution and percentage distribution
- Mean, Median, SD
- Chi square test [23 & 24].

**RESULTS**

The present research work was carried out to assess the knowledge level and practices of staff nurses regarding the care of unconscious patient. Based on the formulated objectives the research findings were presented under the following sections :

- 4.1. Socio-demographic characteristics of the subjects
- 4.2. Knowledge level of the subjects
- 4.3. Practice level of the subjects
- 4.4. Comparison of knowledge and practice scores with the selected demographic variables.

**Description of Socio-demographic characteristics of the subjects :**

This section provides information about general characteristics of individual like age, gender, hours of work, working area, attending CNE, position.

**Age** : Among the 150 subjects, 60 % of them were between the age of 21-25 years, 24.7 % of the subjects were in the age of 25-30 years and 15.3 % of the subjects were above the age of 30 years. **Sex**: In the present study 90.7 % of them were females and 9.3 % were males. **Qualification** : With regard to educational background among the selected staff nurses 35.3 % belongs to ANM's, 42.0 % belongs to GNM's and 22.7 % belongs to B.Sc., Nsg respectively. **Experience** : Among the selected 150 staff nurses 54.7 % of the subjects had 1-4 years of experience, 20 % of the samples were with 4-6 years of experience and 25.3 % of the subjects were with above 6 years of experience. **Current Working area** : Regarding this variable 30.0 % of the subjects are working in NICU, 12.7 % of them are working in surgical ICU, 13.3 % of them are working in coronary ICU, 4.66 % are working in CT ICU and 39.3 % are working in General Ward. **Hours of work** : Coming to working hours 62.0 % of the subjects were working 6 hours / day and 38 % are working for 8 hours shift. **Attending CNE** : 55.3 % of the samples were attending CNE 's regularly, and 44.7 % samples were not attending at all. **Position** : Among 150 staff nurses 26.6 % of them are working as in charge sisters, 30 % are working as Senior sisters and only 43.3 % are working as Junior sisters.

Table 2 shows the mean values of knowledge and practice scores of the subjects, mean value of the knowledge among staff nurses regarding the care of consciousness was 8.28, while it was 11.66 in practice aspects. The median was found to be 9 and 11 in knowledge and practice scores, mode was noted as 11.0 and 10.0 in knowledge and practice aspects respectively. SD was found as 2.69 in knowledge and 3.76 in practice scores. Minimum range was 1 in both the scores and maximum was 14 in knowledge and 22 in practice aspects. These findings show that the study subjects had gained more score in practice aspects, comparatively less in knowledge aspects.

**Knowledge level of the subjects :**

Figure 1 Shows the knowledge scores of the study subjects, according to this 63.4 % of the subjects were having good knowledge in knowledge aspects, whereas 17.3 % had an average knowledge and 19.3 % of the study subjects exhibited poor knowledge regarding the aspects related to care of unconsciousness patients. It has been identified clearly that more than half of the study subjects know the basic theory aspects related to unconsciousness.



### Practice level of the subjects

The data in Figure 2 shows that only 36.6 % of the subjects were doing good while giving care to unconsciousness clients, while 33.3 % of them exhibited average practices of care and 30 % of the subjects had been doing poor practices. It is clearly shown that more than half of the subjects were doing their practices in unsatisfactory levels, while only few of them were doing the best for the unconscious clients.

The above figure tells us the information about knowledge levels of staff nurses. It is noted that the staff exhibited a high knowledge in some areas while the others have no knowledge at all in the same aspect. 62.7 % of the subjects were having good knowledge regarding mouth care importance in an unconscious client while 37.3% of the subjects do not know the importance of mouth care, 72 % of subjects had shown high knowledge level about dietary importance while 28 % of them do not know at all, 76 % of the subjects were well knowledgeable about restraint application, while 24 % of them do not know at all. Considering airway maintenance an important aspect of unconsciousness 77.3 % of the subjects knows the ways of assessing and maintain patent airway while 22.7 % of them were not aware of that, 67.3 % were accepted that nursing management plays a priority role in caring for an unconscious client as 30.7 % had shown medical management as priority. Among the study subjects 75.3 % of the study subjects knows immediate management of unconsciousness rather 24.7 % are not thought of it. In the participated subjects 78 % of subjects knows how to assess the unconscious clients by using Glasgow coma scale and 22 % of them do not know the importance of assessment at all. These results shown that the participated subjects knowledge has to be improved in certain areas while many of them knows about more aspects related to unconsciousness.

The data revealed that 58.7 % of the subjects do not know about GCS, more than half of the subjects (57.3 %) are not aware of central vein care for an unconsciousness, it is hard to note that 72 % of the subjects were never known about the importance of

physiotherapy while caring for an unconsciousness clients. It is clearly noted that 67.3 % of the study subjects do not know the importance of chlorhexidine bath at all, 72 % of the subjects are not known about the importance of correcting fluid and electrolyte imbalances and its importance and 74.7 % were not giving any priority to menu plan and not involving dietician at all in their routine care aspects.

Table No 5 gives the data about association between demographic variables and practices of the study subjects. It is clearly seen that Educational qualification, work area, hours of work, attending to CNE's and position in work place were significantly associated with the unconsciousness care practices indicating highly qualified people exhibited better practices, staff nurses working in neurological ICU's shown good practices and those who attended continuing nursing education classes shown better care. In charge sisters found to be practising best care activities while compared to junior sisters in their respective areas. Age, gender and experienced were negatively associated with demographic variables.

The above table shows the data about association between demographic variables and knowledge scores of the subjects. The data has shown that certain variables like age, experience, hours of work and attending continuing nursing education programmes were positively associated with knowledge scores of the study subjects. While the variables like gender, education, current working area and position were negatively associated with knowledge scores of the subjects.

### Comparison of knowledge and practice scores with the selected demographic variables.

Table No7. shows that the value of Karl Pearson's correlational test. This test is done to identify the influence of both the scores one on the other, resulted that there was a minor correlation between the two scores of knowledge and practice in selected subjects. The score was 0.319 indicating that both the scores were slightly affected.

**Table 1. Demographic characteristics of the study subjects :**

S. No	Demographic variable	Number	Percentage
1	<b>Age</b>		
	21-25 years	90	60 %
	26-30 years	37	24.7%
	Above 30 years	24	15.3 %
2	<b>Gender</b>		
	Females	136	90.7%
	Males	14	9.3%



3	<b>Educational Qualification</b> ANM GNM B.Sc.,	53 63 34	35.3% 42% 22.7%
4	<b>Working experience</b> 1-4 years 4-6 years Above 6 years	82 30 38	54.7% 20% 25.3%
5	<b>Current work area</b> NICU SICU Coronary ICU CT ICU General Ward	45 19 20 07 59	30% 12.7% 13.3% 4.7% 39.3%
6	<b>Hours of work</b> 6 hours 8 hours	93 57	62% 38%
7	<b>Attending CNE</b> YES NO	83 67	55.3% 44.7%
8	<b>Position</b> In charge Sr. Nurse Jr. Nurse	40 45 65	26.7% 30.0% 43.3%

Table 2. Mean, Median, SD of knowledge and practice scores of the subjects:

Baseline parameters	Knowledge Score	Practice Score
Mean	8.28	11.66
Median	9	11
Mode	11.0	10.0
SD	2.69	3.76
Range/ Minimum	1	1
Maximum	14	22

Table 3. Distribution of the Knowledge scores of the study subjects

Level of knowledge	Frequency	Percentage
Good	95	63.3 %
Average	26	17.3 %
Poor	29	19.3 %

Table 4. Distribution of the study subjects based on their practice scores

Practice Levels	Frequency	Percentage
Good	55	36.6 %
Average	50	33.3 %
Poor	45	30 %

Table 5. Association of demographic variables with the practice scores of the study subjects :

Characteristics	Total	Percentage	Chi-Square Test Values	p value
<b>Age</b>			9.49	NS**
21-25 years	90	60%		
25-30 years	37	24.7%		
Above 30 years	24	15.3%		



<b>Sex</b>			5.99	NS**
Females	136	90.7%		
Males	14	9.3%		
<b>Educational Qualification</b>			9.49	S*
ANM	53	35.3%		
GNM	63	42%		
B.Sc., Nsg	34	22.7%		
<b>Current area of work</b>			15.51	S*
NICU	45	30%		
SICU	19	12.7%		
Coronary ICU	20	13.3%		
CT ICU	07	4.7%		
General Ward	59	39.3%		
<b>Experience</b>			9.49	NS**
1-4 years	82	54%		
4-6 years	30	20%		
Above 6 years	38	25.3%		
<b>Hours of work</b>			5.99	S*
6 hours	93	62%		
8 hours	57	38%		
<b>Attending CNE</b>			5.99	S*
Yes	83	55.3%		
No	67	44.7%		
<b>Position in work place</b>			9.49	S*
In charge	40	26.7%		
Sr. Nurse	45	30.0%		
Jr. Nurse	65	43.3%		

\* Significant

\*\* Not significant

Table 6. Association of demographic variables with the Knowledge Scores of the study subjects :

Characteristics	Total	Percentage	Chi-Square Test	p value
<b>Age</b>			9.49	S**
21-25 years	90	60%		
25-30 years	37	24.7%		
Above 30 years	24	15.3%		
<b>Sex</b>			5.99	NS**
Females	136	90.7%		
Males	14	9.3%		
<b>Educational Qualification</b>			9.49	NS*
ANM	53	35.3%		
GNM	63	42%		
B.Sc., Nsg	34	22.7%		
<b>Current area of work</b>			15.5	NS*
NICU	45	30%		
SICU	19	12.7%		
Coronary ICU	20	13.3%		
CT ICU	07	4.7%		
General Ward	59	39.3%		
<b>Experience</b>			9.49	S**
1-4 years	82	54%		
4-6 years	30	20%		
Above 6 years	38	25.3%		



<b>Hours of work</b>			<b>5.99</b>	<b>S*</b>
6 hours	93	62%		
8 hours	57	38%		
<b>Attending CNE</b>			<b>5.99</b>	<b>S*</b>
Yes	83	55.3%		
No	67	44.7%		
<b>Position in work place</b>			<b>9.49</b>	<b>NS*</b>
In charge	40	26.7%		
Sr. Nurse	45	30.0%		
Jr. Nurse	65	43.3%		

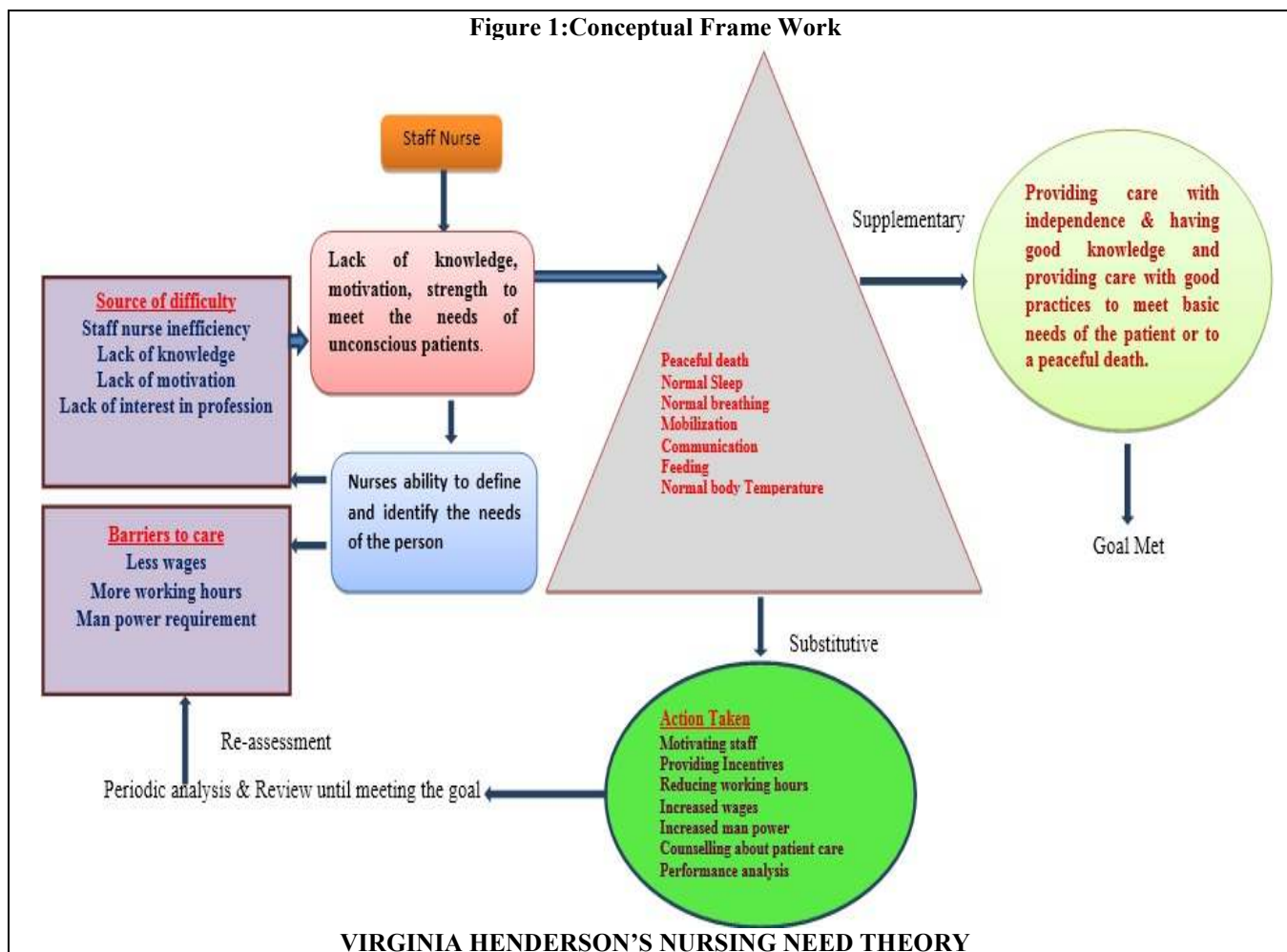
\* Significant

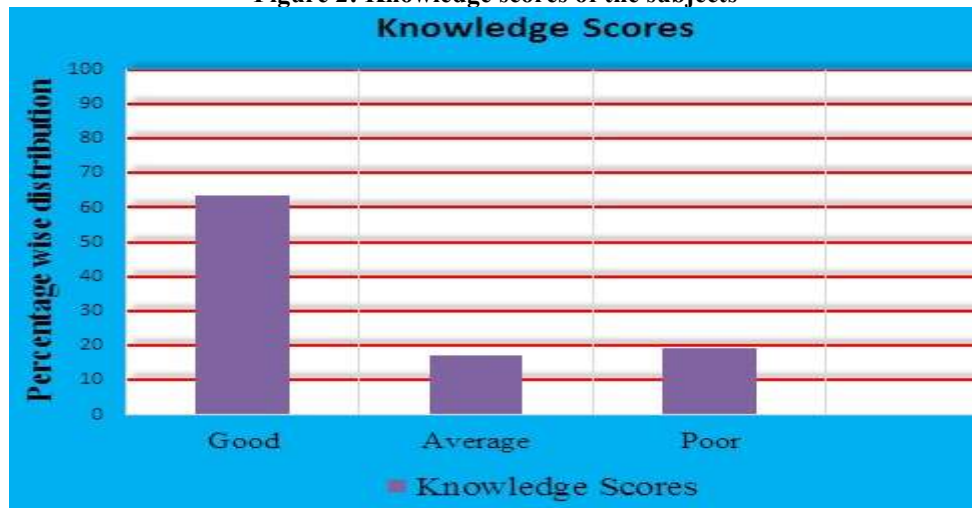
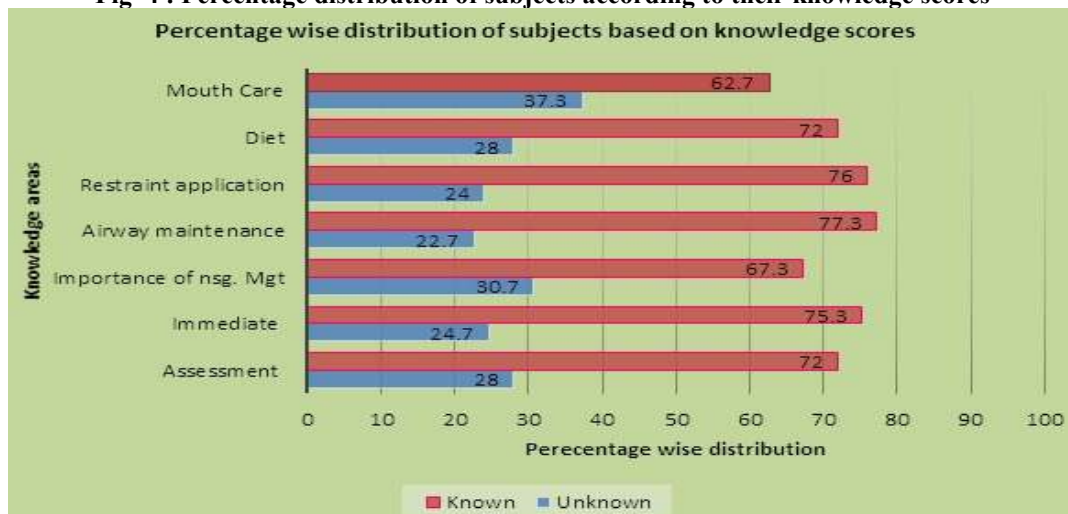
\*\* Not significant

**Table 7. Comparison of Knowledge scores with practice scores of the subjects:**

Karl Pearson's correlation test was used for the present study to identify the relation between the knowledge and practice scores of the selected subjects.

Assessment Areas	Sample size	Pearson's Correlation test
Knowledge Scores	150	0.319.
Practice Scores	150	

**Figure 1: Conceptual Frame Work**

**Figure 2: Knowledge scores of the subjects****Figure 3 :Practice scores of the study subjects****Fig 4 : Percentage distribution of subjects according to their knowledge scores**

**Fig 5 : Percentage distribution of subjects according to their practice scores**

## DISCUSSIONS

### Demographic parameters

Demographic characteristics plays an important role in the part of research. It helps to describe the general features of the study subjects and that could be associated with occurrence of diseases. In the present overview Table No 1 shows that majority of the samples were in between the age group of 21-25 years. Gender differences have been noticed that around 90.7 % of the selected subjects were females, while only 9.3 % of them were only males. In general knowledge score always depends on the educational status of the individual, in the present study also nearly half of the subject 42 % of the subjects completed their diploma in GNM and 35.3 % of them completed their primary education of ANM and only few subjects 22.7 % completed their graduation B.Sc., nursing. The education plays a very important role in delivering care for an unconscious client as highly educated nurses can deliver the best care. There is strong impact of the working area, in this study most of the subjects were working in general ward, followed by Neuro Intensive Care Unit (39.3%), coronary intensive care unit (13.3%), surgical ICU (12.7 %) and only few were noted working in CT ICU (4.7 %). Hours of working had a great impact on knowledge and practice levels of the subjects, where 62 % of them were working for 6 hours and only few (38%) only working for 8 hours. In this study Considering Continuing Nursing Education 55.3 % of them were attending the classes regularly which helps to update their current knowledge levels and 44. % of the subjects were not attending CNE at all. Position in work place is obviously a considerable variable, an in charge is expected to have good level of knowledge compare to junior staff's. In this study nearly half of the nursing staff's were

working as junior staff's, while only 26.7 % of them were only working as in charge sisters.

### Description of Knowledge Scores of the study subjects

In this study, the researcher investigated the practice level of the staff nurses by using the self-structured questionnaire consists of 15 questions.

In the present study majority of the subjects were having good knowledge in the areas of mouth care, dietary modifications, restrain applications, air way maintenance, immediate management and also assessment of unconsciousness. It also seen that poor knowledge was found in the areas of average scores were noted in the areas of Regulation centre of unconsciousness, safety needs of the client, positioning schedules of the client, prevention of pressure ulcer, complications of unconsciousness and Mouth care importance in unconsciousness. The areas with poor knowledge were the causes and complications of unconsciousness.

### Description of Practice Scores of the study subjects

In this study, the researcher also investigated the knowledge level of the staff nurses by using the self-structured questionnaire consists of 25 questions.

In the present study majority of the subjects were providing care with best practices in areas like good knowledge in the areas of mouth care, dietary modifications, restrain applications, air way maintenance, immediate management and also assessment of unconsciousness. It also seen that average knowledge was found in the areas of average scores were noted in the areas of regulation centre of consciousness, safety needs of the client, positioning schedules of the client, prevention of pressure ulcer, complications of



unconsciousness and Mouth care importance in unconsciousness. The areas with poor knowledge were the causes and complications of unconsciousness.

### **Association of demographic variables with the knowledge scores of the subjects**

In this section described about the association of the knowledge scores with the selected demographic variables. Some variables like age, hours of work, experience and attending CNE were highly and positively associated with the knowledge scores. It can be interpreted that knowledge scores were high in the age group above 30 years as this could be due to their experience in the clinical settings, as increased age was also correlated to qualification aspect. The knowledge scores were highly associated with hours of work as it is the time they spend with the clients in their respective work area, overlapping and spending extra time with unconscious clients can help to improve their knowledge regarding the topic. Experience of the staff nurses was positively associated as the experience in the same work area will help the nurses expose to more number of cases, hence the knowledge is improved. The staff nurses attending to nursing training classes will help to update and improve the content of the staff nurses. It is clear that knowledge levels were negatively associated with some variables like position in work place, current area of work, educational qualification and gender variables.

### **Association of demographic variables with the practice scores of the subjects**

In this section described about the association of the practice scores with the selected demographic variables. Some variables like age, gender and experience were shown not associated with the practice scores. It is clear that unconsciousness practices of the study subjects were associated with some important variables like educational qualification, current area of work, hours of work, attending CNE and position in work place. The nursing staff with graduation were found providing best care to unconscious clients as compared to GNM's and ANM's, in the same way current area of work also plays an important role, regarding this the staff nurses working in NICU exhibited high scores as compared to staff nurses working in the general ward, it can be imagined that staff's working in the NICU will be exposed to unconscious clients frequently and thus the practice levels will be high and the staff nurses working in general ward will be less exposed to unconscious cases hence, the scores were expected low. An important aspect of attending CNE, staff's attending CNE regularly were practicing and providing best care for the unconscious clients rather than the staff's who were not attended the

training classes. Among the study subjects in charge staff's were shown a high practice score as compare to junior sisters. All these findings shown that in charge sisters with high qualification attending CNE's were providing the best care to unconscious clients by updating their knowledge. This helps to promote early recovery and to prevent complications associated with unconscious clients.

### **Correlation between knowledge and practice scores of the subjects**

The present study revealed the knowledge and practice scores were mildly affected. As the subjects exhibited almost similar levels in both the aspects, it is said that it was slightly affected with each other. The value was 0.319 in a Karl Pearson's co relational test.

### **SUMMARY AND CONCLUSION**

It includes systematic activities carried out throughout the study. The study entitled "A study to assess the knowledge and practices among staff nurses regarding care of unconsciousness", is an attempt to study the knowledge levels of staff nurses, practices of staff nurses and to compare both with the selected demographic variables. The overall purpose is to assess the knowledge and practice of staff nurses and to improve the existing knowledge and practices.

The **hypothesis** formulated for the study were :

**H<sub>1</sub>** : There will be significant difference between knowledge scores of the study subjects.

**H<sub>2</sub>** : There will be associative difference between practice scores of the study subjects.

**H<sub>3</sub>** : There will be positive association between knowledge and practice scores with demographic data.

### **FINDINGS OF THE STUDY:**

#### **❖ Demographic Profile of the study :**

- The study revealed that 60% of the subjects belongs to age group of 21 – 25 years.
- Majority of the subjects were females
- More number of staff nurses were working in NICU, General Ward.
- Considering CNE's nearly half of the subjects were not attending training classes.
- Maximum number of subjects were having 4-6 years of working experience in various clinical settings.

#### **❖ Knowledge Score of the subjects :**

- The study revealed that 75.3 % of the subjects were having good knowledge regarding the immediate management, maintenance of airway, assessment, dietary planning and restraint application.
- Most of the subjects exhibited average knowledge regarding mouth care, pressure ulcer prevention and importance of nursing management.



➤ More number of subjects poor knowledge in the areas of causes of unconsciousness, communication with the client and complications associated with the condition.

#### ❖ Practice Scores of the study subjects:

➤ Majority of the study subjects were shown poor practices in the following areas involving physiotherapist, use of Braden's scale, involving dietician while planning menu for the client, correcting electrolyte imbalance, use of chlorhexidine solution for bath and about wrist and foot drop prevention.

➤ It is noted that high number of the subjects were graded as average based on their practices in the following areas like assessment with GCS scale VAP prevention, providing privacy, and central venous line maintenance.

➤ It is hard to notice that more number were having poor practices in important areas of nursing care like communication with the client, application of restraints.

#### Strengths:

✓ The data collection was done by the researcher with self administered questionnaire by following the established protocols, hence the data is reliable.

✓ The statistical procedures used for the study helped in analysing data in correct manner as the research wishes to do so.

✓ Good percentage of specificity is the strength of the study

✓ Since the sample size was more, generalisation will have the greatest value.

#### Limitations:

We all are aware that there will be certain limitations for the study probably limited the study outcome.

- Some subjects were denied of filling the questionnaire and some were reluctant to participate in the present study.

- Lack of practical assessment would have limited the study outcome.

- The present study did not include the experimental and control samples.

#### RECOMMENDATIONS

In view of the results of this study, there are suggestions for the future researcher in relation to the present study:

- ❖ It is necessary to improve the knowledge levels of staff nurses regarding the care of unconsciousness.

- ❖ Still the sample size can be increased for better results.

- ❖ It would be beneficial if the researcher provides structural teaching aid regarding the care of unconscious clients.

- ❖ The study can be conducted by keeping experimental and control groups.

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