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# Nurses' Knowledge Regarding Communication with Altered Level of Consciousness Patients

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**Abstract: Background:** One of the cornerstones of professional nursing practices and the skill of providing patients with holistic care, particularly in an intensive care unit, is effective communication.

**Objectives:** The study aimed to assess nurses' knowledge regarding Communication with Altered Level of Consciousness Patients.

**Methodology:** A descriptive study was conducted on the nurses in Al-Samawah city at Al-Hussein teaching hospital. This study started from 1 April 2023 to 30 September 2023.

A randomized (simple random sample) sample of (50) nurses. The data were collected through the utilization of a developed questionnaire, through multiple choice questions. Validity of the questionnaire was determined through pilot study and reliability determined through a panel of experts consist of (15) experts.

**Results:** High level communication was achieved with patients who had altered levels of consciousness.

**Conclusions:** The study concluded that the knowledge level of Communication with Altered Level of Consciousness Patients is high in Al-Hussein Teaching Hospital.

**Recommendations:** Based on the findings, the study advised that it is imperative to raise nursing education and hire more skilled and competent nurses with high standards-oriented abilities to implement Glasgow coma scale neurological assessment in neurosurgical wards.

Keywords: Nurses, knowledge, Communication, Consciousness.

**INTRODUCTION**: Patients that exhibit symptoms of an altered level of consciousness (ALOC) include disorientation, disobedience to commands, or a need for constant stimulation to attain the level of consciousness. Modified State of Awareness (ALOC) has a normal condition and is measured on a continuum of being fully conscious and aware. The ALOC is a delicate and trustworthy gauge of the patient's neurological standing. It is a consequence of, not an illness in and of itself. various pathophysiologic occurrences, It could be neurological (strikes, head injuries), toxicologic (drugs overdose, drunkenness from alcohol, or metabolic (diabetic) hepatic disease2, keto-acidosis the globe about 20 Millions of individuals are sent to intensive care units because varied reasons (Thakur et al., 2016). The nervous system is the most intricate bodily system and the "master computer" of all systems (Burns, 2014). It gives the special capacity for cognition, emotion,



and the comprehension of complicated information as well as the integration of many inputs. It also commands all other systems. The nervous system, which receives and processes all sensory data, produces mental and physical reactions that preserve the integrity of living structures (Urden et al., 2018). A patient is said to be in an altered state of consciousness (LOC) if they are disoriented, defy instructions, or require constant stimulation to become cognizant. A typical state of awareness and full cognition (consciousness) is at one end of the LOC continuum, while a coma is at the other (Hinkle & Cheever, 2018).

The 1960s saw a rise in interest in head injury care, which was prompted by awareness of the condition's rapidly rising incidence, especially from traffic accidents, and its prominence as a cause of death for young males. There was also a growing belief that survival might come at the cost of severe disability and that poor outcomes were frequently the result of management errors (Mattei &Teasdale, 2020).

In individuals with more severe impairments, changes in motor response are the main contributing component, with ocular and verbal responses being more helpful to a lesser extent. It is therefore appropriate to record the clinical findings in each of the three components individually for individual individuals. A valuable summary overall index is communicated by the total score, but with considerable information loss. For pediatric patients, the Glasgow Coma Scale is a valid measure of clinically severe traumatic brain injury, both verbal and preverbal (i.e., injury necessitating neurosurgical intervention, prolonged intubation lasting more than 24 hours, prolonged hospital stay exceeding two nights, or injury leading to death) (Borgialli et al., 2016). The Glasgow Coma Scale (GCS) may be used to objectively describe the degree of decreased awareness in individuals suffering from any type of acute sickness or trauma. The three responsiveness categories that the scale utilizes to assess patients' abilities are eye-opening, motor, and verbal responses. Each of them given separately presents a clear, understandable picture of the patient's state (Jain & Iverson, 2018). Since then, the Glasgow Coma Scale and its total score have been included into a number of clinical guidelines and grading systems for patients with trauma or severe illnesses (Teasdale et al., 2014). Used in more than 75 countries, the Glasgow Coma Scale is a mandatory part of the ICD 11 revision and the NIH Common Data Elements for investigations of brain injuries (Grinnon et al., 2012). The three criteria that make up this scoring system are: (one) eye opening; (two) verbal response; and (three) best motor reaction. The GCS has a maximum score of fifteen and a minimum score of three. A GCS score of seven or lower often denotes a coma. The grading system was first created to help with general communication on the degree of brain damage. But the GCS's applicability has been questioned, especially in light of its low interrater reliability (Miller & Pardo, 2011). A person who possesses consciousness is able to react to stimuli correctly and is aware of their surroundings and self. Both adequate arousal and complete cognition are necessary for full awareness (Lemone et al., 2014).

Table (1): The number of accidents-related injuries in the emergency rooms by governorate	,
kind of accident, and rate per 10,000 people	

Years	Number	Rate					
2020	2547	30.4					
2021	2673	30.4					
2022	3158	35					

(Ministry of Health, 2020, 2021, 2022).

# **Subjects and Methods:**

To achieve the aims of the study, a descriptive and analysis was carried out. on nurses knowledge regarding Communication with Altered Level of Consciousness Patients at Al-Hussein Teaching Hospital in Al- Samawa City. Descriptive study about the nurses' knowledge regarding Communication with Altered Level of Consciousness Patients. A purposive sampling (non-probability) consists of (50) nurses. A pilot study was carried out to test the reliability of the questionnaire. A questionnaire which is consisted of 20 questions, at at Al-Hussein Teaching Hospital in Al- Samawa City. This study started from 1 April 2023 to 30 September 2023. The study



was carried out during the morning shift at the Al-Hussein Teaching Hospital in Al- Samawa city, and self-report – structure question with nurse were performed in the wards (both public and private wards), includes intensive care unit, emergency room, and rehabilitation department), in critical care units Fifty nurses (purposive and non-probability sample) were According to the study's findings, Nurses' Knowledge regarding Communication with Altered Level of Consciousness Patients.

A questionnaire format was developed and established based on a review of previous research, relevant literature, and other studies for the current study's objective study. The instrument's dependability was evaluated using the internal consistency technique and the Alpha Cronbach's test (Alpha Correlation Coefficient) calculation. The Alpha Correlation Coefficient, Version 24.0, was used with IBM SPSS, the Statistical Package for Social Science (Barton & Peat, 2014).

### **Findings from the Study**

Socio-demographic characteristics					St. deviation		
Age	22-30	1	2	28.46	6.834		
_	31-39	40	80				
	40-48	4	8				
	49-50	5	10				
Gender	Male	22	44	1.56	0.501		
	Female	28	56				
Educational	Secondary	8	16	2.36	0.749		
level	Institute	26	52				
	College	16	32				
Marital	Single	28	56	1.46	0.542		
status	Married	21	42				
	Divorced	1	2				
	Widower	0	0				
Total years	1-10	17	34	6.54	7.399		
of service	11-20	25	50				
	21-30	8	16				
	>31	0	0				

 Table 2: The Socio Demographic Characteristics Statistics (N=50)

This table shows average mean of study sample is  $(28\pm6)$  years, in which more of them are young women in age group (31-39) years (80%).

Table 3: Nurses' knowledge regarding Communication with Altered Level of ConsciousnessPatients (n = 50)

NO.	Questions	False		False		Fals	True		Means	u	It
		F	%	Т	%		St. deviation	Assessment			
1	The Glasgow Coma Scale (GCS) is scored	14	28	36	72	1.72	0.454	Good			
2	The worst score of the Glasgow Coma Scale (GCS) is	22	44	28	56	1.56	0.501	Good			
3	The best score of the Glasgow Coma Scale (GCS) is	12	24	38	76	1.76	0.431	Good			
4	When should the Glasgow Coma Scale be used?	6	12	44	88	1.88	0.328	Good			
5	What part of the brain is evaluated when	47	94	3	6	1.06		Poor			



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	1						0.040	
	evaluating eye opening						0.240	
6	The part of the brain that is evaluated when evaluating the verbal response is	40	80	10	20	1.20	0.404	Poor
7	The verbal response test is divided tolevels	27	54	23	46	1.46	0.503	Poor
8	Glasgow Coma Scale 8 or less mean	33	66	17	34	1.34	0.479	Poor
9	Glasgow Coma Scale 9-12 mean	26	52	24	48	1.48	0.505	Poor
10	Glasgow Coma Scale 13-15 mean	33	66	17	34	1.34	0.479	Poor
11	What is the best motor response	18	36	32	64	1.64	0.485	Good
12	Except for one, the Glasgow Coma Scale evaluates each of the following parameters:	9	18	41	82	1.82	0.388	Good
13	Select the correct divisions in the verbal response test	13	26	37	74	1.74	0.443	Good
14	Which of the following patient scores on the Glasgow Coma Scale would be most indicative of a serious head injury?	13	26	37	74	1.74	0.443	Good
15	Your response is a patient who does not react to physical or environmental cues.	6	12	44	88	1.88	0.328	Good
16	According to the Glasgow Coma Scale,	19	38	31	62	1.62	0.490	Good
17	A patient who opens his eyes in response to pain, makes no verbal response, but withdraws from pain has a Glasgow Coma Score:	33	66	17	34	1.34	0.479	Poor
18	On a Glasgow coma scale, the optimal result is:	17	34	33	66	1.66	0.479	Good
19	When your patient has pain, they flex and adduct both arms. This reaction exemplifies:	12	24	38	76	1.76	0.431	Good
20	Patient reacts to pressure by moving their hand up to his face. How would you record this response	33	66	17	34	1.34	0.479	Poor

F-frequency, % - percentage, Assessment: Adequate >2, an adequate less than or equal 2.

This table shows that Assessment of all Knowledge items are in the high level

#### **DISCUSSION:**

Age of Nurses: The present study revealed that age group of the present sample range (31 to 39) years old confirms that majority of nurses' age in the study groups were less than 30 years forming (80 %). The study disagree with this result of a (Jaddoua et al., 2013), who revealed that highest percentage (19%) were (28-32) years old in the study group. This was explained by the fact that the nurses had been in studies, more interested and motivated and much active in this areas.

Gender of Nurses: The present study ensures that the majority of nurses were females with a percentage (56%). The study supported by result of a (Sekab, & Abd, 2021) most of sample were female. The researchers' point of view is that the percentage of female is the highest because, the acceptance rate of nursing students for females is more than the acceptance rate for males.

Educational Level for Nurses: For the level of education the present study revealed majority of nurses (52 %) in the study groups were nursing institute. The study supported with the results of (Kadush, Hameed, & Jrood, 2023) showed that (42%) of the nurses were graduates from nursing college. According to the researchers point of view this is probably due to the large number of governmental and private nursing colleges in recent years, as well as the large number of nurses graduating from these colleges.



**Marital Status of Nurses:** The present study revealed that (44%) of sample were married and (56%) was single because most of the nurses marry immediately after graduation, in addition to the fact that the ages collected from the sample were middle ages, and this age is likely to be a married person.

**Total Years of Services of Nurses:** The study revealed majority (50%) of nurse have (11-20) years of service. The study disagree with this result of a (Jaddoua et al., 2013), that shows (6-10) years of service forming (22%) the present study revealed that age group of the present sample range (31 to 39) years old.

# Discussion of Results Related to Knowledge of Nurses:

The results of assessment of Nurses knowledge regarding communication with altered level of consciousness patients was high level. Based on results of present study that revealed majority of nurses was graduated from nursing institute, which formed (52%) and college of nursing (32%) who have a level of knowledge more than the cognitive level of secondary graduates.

# Conclusions: the present study concluded

Most of the subjects age group were (31 to 39) years old (80%) and the majority of the study subjects (56%) are females less than half of them was married (56%) and less than half of them was single graduated from institute about (52%), and total years of services (11-20) form (50%). The result of assessment of nurses' knowledge regarding Communication with altered Level of Consciousness Patients was good level.

# **Recommendations: the study recommends:**

Improve knowledge and performance of GCS nurses through continuous training programs for a period of three months at least. Increasing the number of nursing staff in ICU units. Nurses' participation in educational courses and seminars, so that their experience increases. A booklet should be designated and distributed to all nurses who were working in ICU unit.

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