

Nurses' Knowledge toward Care of Unconscious Adult Patients at Teaching Hospitals in Al-Hilla City

معارف الممرضين تجاه العناية بالمرضى البالغين فاقدى الوعي في المستشفيات التعليمية في مدينة الحلة

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المستخلص:

الهدف: تهدف الدراسة الى تقييم معارف الممرضين تجاه العناية بالمرضى البالغين فاقدى الوعي والتعرف على العلاقة بين معارف الممرضين تجاه العناية بالمرضى البالغين فاقدى الوعي والخصائص الاجتماعية الديموغرافية مع بعض المتغيرات. **المنهجية:** تم اجراء دراسة وصفية في وحدات العناية الحرجة لتقييم معارف الممرضين تجاه العناية بالمرضى البالغين فاقدى الوعي في المستشفيات التعليمية في مدينة الحلة في الفترة من ٢٠ سبتمبر ٢٠١٨ إلى ٢ يونيو ٢٠١٩ .

تم اختيار عينة (غرضية) غير احتمالية تضمنت ٦٠ ممرض وممرضة يعملون في وحدات العناية الحرجة في (مستشفى الإمام الصادق "ع" التعليمي ومستشفى الحلة التعليمي العام). تم جمع العينة باستخدام الأداة التي تتكون من أربعة أجزاء. الجزء الأول هو البيانات الديموغرافية لعينة الدراسة التي تتكون من ١٠ فقرات ، والجزء الثاني هو أسئلة الاختيار من متعدد المتعلقة بمعارف الممرضين التي تتكون من ٣٢ فقرة. تم التحقق من صحة الأداة من قبل ١٣ خبيراً ، يتمتع كل منهم بخبرة تزيد عن ١٠ أعوام في التخصص ، وتم تحديد موثوقية التركيب الداخلي من خلال ارتباط كرونباخ حيث كانت = ٠,٩٢. أجريت البيانات التي تم تحليلها من خلال تطبيق الإحصاءات الوصفية (التكرارات ، النسب المئوية ، متوسط الدرجات ، الانحراف المعياري) والإحصاءات الاستنتاجية (معامل الارتباط ألفا و ANOVA).

النتائج: أظهرت الدراسة أن غالبية المشاركين في الدراسة هم من الذكور ممن تتراوح أعمارهم بين (٢٠-٢٩) سنة من حملة شهادة البكالوريوس في التمريض، وأن أكثر من نصفهم عزاب و كانت سنوات الخبرة لديهم في مجال التمريض في المستشفى عامة وفي وحدة العناية المركزة خاصة من (٥-١) سنة وان نصف المشاركين كانوا يمارسون عملهم في الوقت الصباحي والمسائي اي خلال ٢٤ ساعة، وان غالبيتهم ليس لديهم مشاكة في دورات تدريبية حول وحدة العناية المركزة. كذلك اظهرت الدراسة ان معارف الممرضين تجاه العناية بالمرضى البالغين فاقدى الوعي كانت كافية.

التوصيات: يوصى بتوفير برامج فيديو متقدمة واجتماعات محددة وبرامج وورش عمل وأنشطة تدريبية وحلقات دراسية وكتيب للكادر التمريضي حول كيفية العناية بالمرضى البالغين فاقدى الوعي من اجل زيادة معارفهم. يوصى أيضاً بتوفير الأدوات والمعدات اللازمة من قبل وزارة الصحة لاستخدامها في وحدة العناية المركزة ، ومن الموصى به ايضا اجراء دراسات مستقبلية. **الكلمات المفتاحية:** الممرضين ، المعارف. المرضى البالغين فاقدى الوعي .

Abstract

Objective: The study aims to evaluate nurses' knowledge toward care of unconscious adult patients and identify the relationship between nurses' knowledge toward care of unconscious adult patient and their demographic characteristics of age, gender, Marital Status, level of qualification and years of experience.

Methodology: A descriptive study (quantitative design) was carried out by using quasi experimental design to study nurses' knowledge, attitudes and practices toward care of unconscious adult patients at teaching hospitals in Al-Hilla City from September 2018 up to June 2019.

A purposively sample has been chosen in which included 60 nurses who work in ICUs within two hospitals (Imam Al-Sadiq teaching hospital and Al-Hilla general teaching hospital). The sample has been collected by using the tool that involves four parts. The first part is demographical data for a study sample which consists of 10 items, the second part is multiple choice questions related to nurses' knowledge which consists of 32 items, The tool has been validated by 11 experts, all of them have experience more than 10 years, a reliability is determined by Crohn Bach correlation where $r = 0.92$. The analyzed data have been stated during using of descriptive statistics (frequencies, percentages, mean of scores, Standard deviation) and inferential statistics (Coefficient alpha correlation and ANOVA).

Results: The study showed that the majority of the participants in the study were males aged between 20-29 years of bachelor's degree in nursing. More than half of them were single and had years of experience in hospital and in intensive care unit (1-5) years, and half of the participants were doing their work in the morning and evening, within 24 hours, and the majority did not participate in training sessions on the intensive care unit. The study also showed that nurses' knowledge toward care of unconscious adult patients was enough.

Recommendations: Advanced video programs, specific meetings, programs, workshops, training activities and seminars, and Booklet are should be provided for nurses on how to care of unconscious adult patients to increase their knowledge, it's recommended to the Ministry of Health to provide the necessary advanced supplies and equipment for use in intensive care units (ICUs) and It is recommended for future studies conduction.

Keywords: Nurses, knowledge, Unconscious adult patients.

Introduction:

Intensive Care Unit (ICU) is a specialized placing where the crucial affected person is obtained or cared. Most patients in the intensive care unit are unconscious, sensory deprived, then hold restricted activity as a result of disease or any other disability ⁽¹⁾. Intensive care unit (ICU) can care supplied by particularly staffed and equipped within a detached hospital unit which devoted to the monitoring, caring and curing of patients with life threatening diseases, damages or complications from which cure is mostly potential, an intensive care unit prepares special experiences and skills to return function of body organs to normal to treat the central cause ⁽²⁾. Intensive care unit (ICU) nurses represent the greatest expected and trained team practicing within the ICU. In addition, professional nurses in ICU carry at least four main principles: knowledge, skills, attitude, ethics and values. Nurses using these principles to cure the patient, such as improved patient outcomes, reduce diseases, decrease death rate, reduced complications and mistakes. Therefore, patients in the ICU and their families profit interest from exceptionally skilled staff ⁽³⁾. Patients in the intensive care unit rely heavily on nurses because they are unconscious and do not have the ability to take care of themselves and control them. Nurses skills acquired can promote trust in caring for patients, these skills provided to care of unconscious adult patients are not

Methodology:

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restricted to only care principle, However, the knowledge principle to begin assessment, planning and intervention of care. Ethics and values refer to Nurses' attitude that is concerned with activities and practices of nurses towards of providing care for an unconscious patient. Ethics and values, including cooperative nurses with them other and providing a holistic care to the unconscious patient mixed with high confidence, validity and sincerity ⁽⁴⁾. One of nurse's rule toward an unconscious patient is caring, this duty demands skill, right decision, and the capacity to conduct assessment, then problem solving by using only objective data. The aims of an unconscious patients care involve primary and continuous assessment of the patient's condition, monitoring unconscious patients closely, washing and cleaning the skin, conservation of the lucid and open airway, maintain fluid and electrolyte balance, providing medication as prescribed, checking a vital signs every two hours, protection from injury, free of corneal irritation, change dressing as doctor order, change position every two hours, sucking secretions as needed, preventing or reducing complications, and very important contact with unconscious patient's family as support them to reduce anxiety, all those care and more are present in the intensive care unit ⁽⁵⁾.

Hilla City from September 2018 up to June 2019.

A purposively sample has been chosen in which included 60 nurses who work in ICUs within two hospitals (Imam Al-Sadiq teaching hospital and Al-Hilla

general teaching hospital). The sample has been collected by using the tool that involves four parts. The first part is demographical data for a study sample which consists of 10 items, the second part is multiple choice questions related to nurses' knowledge which consists of 32 items. To identify the reliability of the study instrument, Alpha Correlation Coefficient (r) was applied for the purpose of measuring the internal consistency of the study instrument by applying of Statistical Package for Social Science Program (IBM SPSS) version 22.0 . The tool has been validated by 11 experts, all of them have experience more than 10 years, A purposive sample of (10) nurses from both genders was selected from

intensive care unit (ICU) in Imam Al-Sadiq General Teaching Hospital and Al-Hilla General Teaching Hospital to determine the reliability, clarity of instrument and estimate the average time that consumed to collect data from the whole sample.

a reliability is determined by Crohn Bach correlation for KAP study where $r=0.92$. The analyzed data have been stated during using of descriptive statistics (frequencies, percentages, mean of scores, Standard deviation) and inferential statistics (Coefficient alpha correlation and ANOVA).

Results:

Table (1): Socio-Demographic Characteristic of the Study Sample

Demographic Data	Groups	Frequency	Percentage
Age / Years	20 to 29	48	80.0
	30 to 39	7	11.7
	40 to 49	4	6.7
	50 to 59	1	1.6
	Total	60	100.0
	Mean \pm Std. Deviation	27.88 \pm 6.855	
Gender	Male	53	88.3
	Female	7	11.7
	Total	60	100.0
Marital Status	Single	42	70.0
	Married	18	30.0
	Total	60	100.0

Level of Qualification	Nursing bachelor's degree	33	55.0
	Nursing diploma degree	14	23.3
	Nursing Secondary School Graduate	4	6.7
	Others	9	15.0
	Total	60	100.0
Years of Experiences in the Hospital	1 to 5	46	76.7
	6 to 11	9	15.0
	12 to 17	4	6.7
	18 to 23	1	1.6
	Total	60	100.0
Years of Experiences in the ICU	1 to 5	47	78.3
	6 to 10	10	16.7
	11 to 15	3	5.0
	Total	60	100.0
Shift Time	Morning	10	16.7
	Evening	20	33.3
	Morning and Evening	30	50.0
	Total	60	100.0
Business Hours	Al-Emam Al-Sadiq Teaching Hospital /morning (6 hrs.)	7	11.7
	Al-Emam Al-Sadiq Teaching Hospital /morning and evening (24 hrs.)	30	50.0
	Al-Hilla Teaching Hospital/ morning (6 hrs.)	3	5.0
	Al-Hilla Teaching Hospital/ evening (18 hrs.)	20	33.3
	Total	60	100.0
Participation in ICU Training Sessions	Yes	13	21.7
	No	47	78.3
	Total	60	100.0

Place of Training Session	Inside Country	12	20.0
	Outside Country	1	1.7
	None	47	78.3
	Total	60	100.0
Number of Training Session	One Course	8	13.3
	Two Courses	4	6.7
	Three Courses or More	1	1.7
	None	47	78.3
	Total	60	100.0
Topic of training Sessions	Intensive Care Unit (ICU)	2	3.3
	Care of Unconscious Patients	2	3.3
	Cardiopulmonary Resuscitation (CPR)	3	5.0
	Electrocardiogram (ECG)	1	1.7
	Intensive Care Unit (ICU) and Care of Unconscious Patient	3	5.0
	Intensive Care Unit (ICU) And Sterilization	1	1.7
	Unconscious Patient Safety	1	1.7
	None	47	78.3
	Total	60	100.0
Training Session Site	Al-Emam Al-Sadiq General Teaching Hospital	3	5.0
	Al-Hilla General Teaching Hospital	6	10.0
	Merjan Teaching Hospital	1	1.7
	Germany	1	1.7
	Al-Emam Al-Sadiq General Teaching Hospital and Al-Hilla General Teaching Hospital	2	3.3

Duration of Training Session	None	47	78.3
	Total	60	100.0
	One week	9	15.0
	Two weeks	3	5.0
	Three weeks or more	1	1.7
	None	47	78.3
	Total	60	100.0

Table (1) shows that (80 %) of the study sample are at age group (20 to 29) years old, (88.3 %) of them are males, (70 %) of the present study are single, level of qualification represents that half of them (55 %) are nursing bachelor's degree, (76.7%) of nurses have (1 to 5) years of experiences in the hospital. (78.3 %) of nurses have (1 to 5) years of experience in intensive care unit. (50 %) of nurses who are worked morning and evening as shift time, and the same obvious percentage represents business hours of nurses at Al-Emam Al-Sadiq Teaching Hospital /morning and evening (24 hrs.). The majority of nurses (78.3 %) did not have training sessions in intensive care unit (only (21.7 %) of nurses have participation in intensive care unit) and the same obvious percentage did not have place of training session (only one nurse of them is outside country (1.7 %) and (20 %) of nurses are inside country). Number of training session, topic of training sessions, training session site, and duration of training session have the same majority percentage (78.3 %).

Table (2): Statistical Distribution of Nurses' Knowledge toward Care of Unconscious Adult Patients

No.	Items	Classification	F	%	M.S	SD	Assessment
1	Patient considers unconscious if:	False	5	8.3	1.08	.279	Pass
		True	55	91.7			
		Total	60	100.0			
2	Causes of unconsciousness:	False	6	10.0	1.10	.303	Pass
		True	54	90.0			
		Total	60	100.0			
3	Which of the following are common	False	7	11.7	1.12	.324	Pass

	causes of unconsciousness?	True	53	88.3			
		Total	60	100.0			
4	Glasgow coma scale is used to assess:	False	15	25.0	1.25	.437	Pass
		True	45	75.0			
		Total	60	100.0			
5	According to Glasgow coma scale, unconscious patient can classify to:	False	7	11.7	1.12	.324	Pass
		True	53	88.3			
		Total	60	100.0			
6	The normal respiratory rate for an adult male is:	False	8	13.3	1.13	.343	Pass
		True	52	86.7			
		Total	60	100.0			
7	If a patient is cyanosed, what might their oxygen saturation level be?	False	7	11.7	1.12	.324	Pass
		True	53	88.3			
		Total	60	100.0			
8	Which of the following may result in a decreased supply of oxygen to the brain?	False	27	45.0	1.45	.502	Pass
		True	33	55.0			
		Total	60	100.0			
9	Accumulation of secretions in the lungs can cause:	False	53	88.3	1.88	.324	Fail
		True	7	11.7			
		Total	60	100.0			
10	How long should a suction procedure last?	False	32	53.3	1.53	.503	Fail
		True	28	46.7			
		Total	60	100.0			
11	During the examination of the unconscious patient, the nurse notices that the patient's pupils are fixed and dilated. This refers to?	False	5	8.3	1.08	.279	Pass
		True	55	91.7			
		Total	60	100.0			
12	When caring for the unconscious patient, what nursing intervention takes highest priority?	False	7	11.7	1.12	.324	Pass
		True	53	88.3			
		Total	60	100.0			

13	What is the priority concern when providing oral hygiene for the unconscious patient?	False	2	3.3	1.03	.181	Pass
		True	58	96.7			
		Total	60	100.0			
14	When feeding the unconscious patient with nasogastric tube (NG tube), the priority of care is:	False	14	23.3	1.23	.427	Pass
		True	46	76.7			
		Total	60	100.0			
15	A priority in the postoperative management of a patient who has had intracranial surgery is?	False	11	18.3	1.18	.390	Pass
		True	49	81.7			
		Total	60	100.0			
16	The earliest sign of increased intracranial pressure (ICP) for unconscious patient is:	False	43	71.7	1.72	.454	Fail
		True	17	28.3			
		Total	60	100.0			
17	An unconscious patient has a diagnosis of deficient fluid volume related to fluid restriction related to osmotic diuretic use. What would be an appropriate intervention for this diagnosis?	False	25	41.7	1.42	.497	Pass
		True	35	58.3			
		Total	60	100.0			
18	An unconscious patient is receiving a lot of fluid for 24 hours, the nurse will recognize that by:	False	58	96.7	1.97	.181	Fail
		True	2	3.3			
		Total	60	100.0			
19	To assess hydration status by:	False	23	38.3	1.38	.490	Pass
		True	37	61.7			
		Total	60	100.0			
20	Why would it be necessary to take a 24-hour urine collection for protein?	False	32	53.3	1.53	.503	Fail
		True	28	46.7			
		Total	60	100.0			
21	The appropriate position of the unconscious patient is:	False	23	38.3	1.38	.490	Pass
		True	37	61.7			
		Total	60	100.0			
22	What position should not be used for	False	9	15.0	1.15	.360	Pass

	the unconscious patient?	True	51	85.0			
		Total	60	100.0			
23	To prevent airway obstruction of the unconscious patient:	False	9	15.0	1.15	.360	Pass
		True	51	85.0			
		Total	60	100.0			
24	To protect the unconscious patient from injury:	False	10	16.7	1.17	.376	Pass
		True	50	83.3			
		Total	60	100.0			
25	To prevent the unconscious patient's corneal dryness:	False	28	46.7	1.47	.503	Pass
		True	32	53.3			
		Total	60	100.0			
26	To prevent pressure ulcer, consider of:	False	6	10.0	1.10	.303	Pass
		True	54	90.0			
		Total	60	100.0			
27	How would you know if a patient who is unconscious is in pain?	False	5	8.3	1.08	.279	Pass
		True	55	91.7			
		Total	60	100.0			
28	Why might a patient need a tracheostomy?	False	2	3.3	1.03	.181	Pass
		True	58	96.7			
		Total	60	100.0			
29	The common complication that occur in the unconscious patient is:	False	15	25.0	1.25	.437	Pass
		True	45	75.0			
		Total	60	100.0			
30	What diagnostic test is contraindicated in a patient exhibiting clinical manifestations of increased intracranial pressure?	False	27	45.0	1.45	.502	Pass
		True	33	55.0			
		Total	60	100.0			
31	The purpose of surfactant in the lungs is:	False	31	51.7	1.52	.504	Fail
		True	29	48.3			
		Total	60	100.0			

32	What percussion you expect and notice when a patient has pneumothorax?	False	47	78.3	1.78	.415	Fail
		True	13	21.7			
		Total	60	100.0			

No: Number, F: Frequency, %: Percentage, M.S: Mean of score, SD: standard deviation, Pass: M.S = more than 1.5 , Fail: M.S = less than 1.5

Table (2) reveals the statistical distribution of nurses' knowledge toward care of unconscious adult patients, the nurses in which all items reveal enough knowledge (pass) toward care of unconscious adult patients because the mean of score of all knowledge items more than (1.5). Except the items number (9, 10, 16, 18, 20, 31, 32) nurses' knowledge in this item were low (fail) because the mean of score in these items (1.88, 1.53, 1.72, 1.97, 1.53, 1.52, 1.78) less than (1.5).

Table (3): Overall of Nurses' Knowledge Evaluation toward Care of Unconscious Adult Patients

Total	Classification	F	%	M.S	SD	Assessment
Overall knowledge	False	0	0	1.6880	.08923	Pass
	True	60	100.0			
	Total	60	100			

F: Frequency, %: Percentage, M.S: Mean of score, SD: Standard deviation

Table (3) shows that nurses have enough knowledge (pass) toward care of unconscious adult patients (mean of score of overall nurses' knowledge is more than 1.5).

Table (4): Mean Differences (ANOVA) Between the Overall Evaluations of the Nurses' Knowledge According to their Demographic Data

Demographic Data		Nurses' Knowledge				
		Sum of Squares	df	M.S	F	P Value
Age / Years	Between Groups	971.471	11	88.316	2.354	.020
	Within Groups	1800.713	48	37.515		
	Total	2772.183	59			
Gender	Between Groups	.909	11	.083	.752	.684
	Within Groups	5.275	48	.110		
	Total	6.183	59			

Level of Qualification	Between Groups	18.373	11	1.670	1.524	.154
	Within Groups	52.610	48	1.096		
	Total	70.983	59			
Years of Experiences in the Hospital	Between Groups	735.542	11	66.867	2.475	.015
	Within Groups	1296.858	48	27.018		
	Total	2032.400	59			
Years of Experiences in the ICU	Between Groups	187.568	11	17.052	1.527	.153
	Within Groups	536.165	48	11.170		
	Total	723.733	59			

df: Degree of freedom, M.S: Mean of score, F: F-Statistic, P value: Probability value

Table (4) reveals that there are two significant relationships between nurses' knowledge toward care of unconscious adult patients with respect to their age and years of experiences in the hospital (.020, .015) respectively at (P -value ≥ 0.05). While there is no significant association has been reported between nurses' knowledge with the others demographic data (gender, level of qualification, years of experiences in the ICU) at (P - value ≤ 0.05).

Discussion:

The analysis of findings in table (1) showed that the majority of the study sample are in the age group (20 to 29) years old within a mean (27.88). These findings are supported by the study who found that the majority of nurses (48%) of the study sample were in the age group (26-29) years old. Also, this finding of the present study supportive evidence is available in the study that showed the age of the study sample is within the age group of (23-26) years of age and within 25.1 ± 3.8 mean of age. While this finding disagreed with the result of the study where reported that age group were between 31 and 49 years old and with (mean=38.5) ⁽⁶⁻⁷⁻⁸⁾.

The majority of nurses is males. These results come along with the findings the study in which higher percentages (75%) of nurses were males. The current finding is also supported by findings of a study reported that the majority of the

samples (60 %) were males. In addition, this finding disagreed with the result of the study where shown that the majority (75 %) of the group study were females. Also, the findings of the current study are disagreed with a study that stated the majority (88.8 %) of the study group were females ⁽⁷⁻⁸⁻⁹⁻¹⁰⁾.

According to the subject marital status, most of the sample are single. This finding of the current study is disagreed with a study where reported that the majority of the present study (70%) are married. Also, this finding inconsistency with the result of the study which stated that the majority of nurses were married ⁽⁸⁻⁹⁾.

Regarding level of qualification, more than half of the nurses are academic nurse. These results agreed with the findings of the study who reported that (80%) of nurses had bachelor. Additionally, this finding is also supported by a study who stated that the majority of nurses (42.5

%) were college of Nursing graduated. But the findings of the current study are disagreed with the study which found that half (50 %) of nurses were high nursing school graduate. Also, the findings of the current study are disagreed with the study which shown that half of participants were master's degree in nursing and the others were bachelor's degree in nursing. In addition, this finding was not supported by the result of the study who mentioned that sixty nurses (50%) had a diploma in nursing, 50 (42%) had a bachelor's degree and 10 (8%) had a master's degree in nursing⁽⁶⁻⁷⁻⁸⁻⁹⁻¹⁰⁾

In table (2), the result of this study represents assessment of nurses' knowledge toward care of unconscious adult patients, nurses' knowledge is assessing according to pass that indicate good nurses' knowledge and fail which represents poor nurses' knowledge in all items.

The researcher believes that the nurses have good knowledge due to years of experience in the hospital as general and in intensive care unit as specific.

Most items of nurses' knowledge are agreed with the results of who reported that good and satisfied nurses' knowledge for true answer and unsatisfied nurses' knowledge for false answer⁽⁶⁾

In table (3), the result of this study represents assessment of overall nurses' knowledge toward care of unconscious adult patients, the nurses had good knowledge lead to pass of nurses most the items regarding to nurses' knowledge.

This finding is consistence with the study where stated that nurses had satisfied knowledge about immediate care of unconscious patient⁽⁶⁾

Also, this finding is also supported with findings of the study which reported that nurses had average knowledge regarding care of unconscious patients⁽¹¹⁾.

In addition, these findings disagreed with the results of the study who founded that nurses in the cardiac intensive care unit had much lower levels of knowledge and awareness regarding increased risk of exposure keratopathy compared to nurses in the Medical Intensive Care Unit⁽⁷⁾

Regarding table (4), data analysis indicated that no significant relationships between nurses' knowledge and gender, level of qualification, years of experiences in the ICU. While they were highly significant relationships between nurses' knowledge and their age and years of experiences in the hospital.

The researcher believes that the present of such a relationship is due to increase nurses' acquired experiences in the hospital and participation in training sessions under the hospital program.

This finding agreed with the findings of the study where shown that no association between nurses' knowledge and ICU experience. While these findings disagreed with the same results of the study who mentioned that present relationships between nurses' knowledge and age, years of experience in the hospital^(11,12)

Recommendations:

1. Engaging critical care nurses in special training sessions to increase their knowledge concerning care of unconscious adult patients.
2. The study recommends developing assessment sheet for skills and daily nurses note for neurological unconscious patients, release guideline in the hospital for care of unconscious adult patients depends upon hospital policy and strategy and increase training-session program for nurses for care of unconscious patient and intensive care unit.
3. Engaging nurses who has bachelor's degree in critical care units.

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