Impact of Unconscious Patients Communication Educational Sessions on the Intensive Care Nurses Unit Knowledge in Al- Hilla City

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Abstract

Background: The critical care unit is considered one of the most important areas in the hospitals, since it receives patients with severe and complicated conditions. In these units, attentive and consistent supply of caring behaviors is essential. Continuous monitoring and caring, good communication with patients and their families, supporting and encouraging patients' engagement in treatment decision-making are all vital roles for critical care unit nurses to perform (Zare, et. al., 2020). Objective: To evaluation the impact of communication educational sessions on the intensive care nurse's knowledge. Methodology: A quantitative quasi-experimental design study to achieve the study objectives which directed to evaluate the impact of Communication Educational Program on the Intensive Care Unit Nurses Knowledge started from 9 January to 20 June 2022. The research conduct at the intensive care units at Al- Hilla Teaching Hospital and Imam Al- Sadeq teaching hospital. Purposive non- probability sample methods select which consisted of (63) nurses divided as (30) nurses for interventional group, and (33) nurses for control group specific questionnaire prepared to collect the data. Results: Most of participants 16(48.5%) and 19(63.3%) in both group (control and interventional) were between age group (24-26) years, 18(54.5%), 19(63.3%) were male, most of them bachelor holder 22(66.7%) and 18(60.0%), when most of the demographical characteristics matched among the study group it means the equivalence of the group. the pretest of both study group recorded unsatisfied level of knowledge related to basic communication principles with the unconscious patients as (1.49 ± 0.206), (1.49 ± 0.175). During the posttest the control group shows the same poor level clearly, while the nurses who attend the educational program session recorded significant improvement in their two posttests as (1.79± 0.158) and (1.71± 0.176). Conclusion: Most of the control group member have (2-5) years of experience in the critical care unit, where in the interventional group members were within one year. Most of the participant in the both groups recorded unsatisfied level of knowledge in pretest regarding to all communication domains. While significant differences found among interventional group members through the first and second post- test, the content of the education program act as a positive factor to improve the knowledge..

Keywords: Intensive care unit nurses, communication, knowledge, educational program

1. Introduction

One of the fundamentals of professional nursing practice and the art of holistic patient care is the ability to effectively communicate with patients. Nurses employ a variety of communication strategies to accomplish a variety of tasks, including giving orders, reassuring patients, provide comfort, and information. Nurses are unable to successfully assess, plan, provide, or evaluate care if there is a lack of communication (Othman & El-Hady, 2015).

The purpose of communication is to convey information, transmit messages, and develop, strengthen, or otherwise affect relationships. Communication may take both verbal and nonverbal forms. Facial expression, touch, and the timbre of one's voice are all examples of non-verbal communication. Communication serves as the foundation for the connection between a nurse and patient and is a crucial component of trust and comfort. Nurses working in the intensive care units (ICU) face especial challenges when communicate with unconscious ill, mechanically ventilated or sedated patients. Communication between these patients and nurses needs specific skill of commitment, and knowledge (Dithole, et. al., 2017). Critically ill patients are often unable to communicate because of changes in physiological status or level of consciousness (LOC), sedation, or intubation which may make pain assessment difficult. However, the first steps to effective pain management are assessment and pain recognition. assessment of pain is an essential critical care nursing duty, and may have an effect on patient outcomes by decreasing the period of mechanical ventilation and has a positive effect on pain management, and the incidence of nosocomial infections (MokhtarAbdallah, et. al., 2018).

Nurses in the intensive care unit do not usually communicate with patients because of the nature of the intensive care unit's environment leading to communication breakdown. However, high quality communication is important to facilitate patient-centred care. The importance of communication in

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the critical care units requires that nurses who work with these patients should be well equipped with the knowledge of communication (Dithole, 2014).

Intensive care unit psychosis can be avoided by maintaining open communication with patients who are sedated and ventilated, allowing for information and emotional support to be exchanged, as well as eliminating a sense of isolation that can contribute to intensive care unit psychosis. A means of guiding and delivering meaningful sensory information to the unconscious patient through verbal communication. Individualizing treatment and utilizing familiar voices or just stating the patient's name may give greater sensory input (Simões, Joao, et. al., 2012).

Objectives of the Study

Assess of intensive care nurses toward unconscious patient communication.

Evaluate the impact of an educational program modeled toward communication skills for nurses that work in intensive care unit.

Methods

Methodology

A quantitative study quasi-experimental design was used with the application of pre, and posttest to achieve the study objectives which directed to evaluate the Effectiveness of Patient Communication Skills Educational Program on the Intensive Care Unit Nurses Knowledge started from 9 January to 20 June 2022. The study process conducted at the intensive care units at Al- Hilla Teaching Hospital (Al- Hilla teaching hospital and Imam Al- Sadeq teaching hospital). Purposive non- probability sample methods used to select the sample of the study to achieve the study objectives. The study sample consisted of (63) nurses out of (125) nurses were selected, he sample divided as (30) nurses for interventional group, and (33) nurses for control group.

In order to evaluate the effectiveness of communication on the intensive care unit nurse's knowledge in Al- Hilla city, after review of literature proper questionnaire prepared. The questionnaire includes three part: first part: demographic characteristics of nurses, second part was employment information, third part knowledge of nurses on communication with unconscious patients question, which constricted as multiple choise. Reliability of the questionnaire was determined by carrying out a pilot study which performed on (10) nurses to estimate the statistical stability of the questionnaire and their reliability coefficients used (r= 0.80).

Ethical Consideration

Before conducting the study, verbal and written permission was taken from the all nurses that participate in the study.

Data collection

Data were collected during the period of between 9 January to 27 March 2022; the sample of the study includes the nurses who working in intensive care unit and providing care for critical patients. The nurses participated after taking their agreement. All participant exposed to pretest to assess the nurse's knowledge related to communication with unconscious patient. The educational program given to interventional group (30) nurses who work in intensive care unit. The educational program include four session, first session (anatomy and physiology of nervios system), the second session about the (patient communication principle), third (therapeutic and non-therapeutic communication), fourth (education with unconscious patient and their family) The nurses divided to small group each group between 5- 10 nurse. Each session needs one hour, two posttests performed with different interval which take about 4 weeks for both group (interventional and control).

2. Results

Table 1: Allocation of the interventional and control group members according to the demographical characteristic

Demographic characteristic	Rating	Control group		Interventional	
		frequency	percent	frequency	percent
Age/ years	Less than 24	7	21.2	7	23.3
	24-26	16	48.5	19	63.3
	more than 26	10	30.3	4	13.3
	total	33	100.0	30	100.0
Gender	Male	18	54.5	19	63.3
	Female	15	45.5	11	36.7
	Total	33	100.0	30	100.0
Education status	Nursing school graduate	0	0	2	6.7
	Graduate Diploma in Nursing	11	33.3	9	30.0
	Bachelor of Nursing graduate	22	66.7	18	60.0
	Postgraduate graduate	0	0	1	3.3
	Total	33	100.0	30	100.0

Table 2: Distribution of the study sample (interventional and control) related to their employment information

Item	Rating and intervals	Control group		interventional group	
		frequency	percent	frequency	percent
Years of services in nursing	1year and less	9	27.3	18	60.0
	2-5 years	22	66.7	9	30.0
	6 and more	2	6.1	3	10.0
	Total	33	100.0	30	100.0
Years of services in ICU	1year and less	15	45.5	22	73.3
	2-5 years	17	51.5	6	20.0
	6 and more	1	3.0	2	6.7
	Total	33	100.0	30	100.0
Participated in courses on communication with unconscious patients	yes	3	9.1	7	23.3
	no	30	90.9	23	76.7
	total	33	100.0	30	100.0

Table 3: Responses of the study sample (both group) related to their knowledge regarding nervous system anatomy and physiology

N	items	Control			Interventional		
		Pre	Post1	Post2	pre	Post1	Post2
		M//SD	M//SD	M//SD	M//SD	M//SD	M//SD
1.	The functions of the nervous system include information reception, integration, and nerve impulse conduction to recipient cells.	1.88 0.331	1.82 0.392	1.76 0.435	1.83 0.379	1.9 0.305	1.9 0.305
2.	The majority of nervous system activity originate from sensory receptors including auditory, tactile, and visual receptors that transferred to the central nervous system by:	1.58 0.502	1.39 0.496	1.7 0.467	1.33 0.479	1.8 0.407	1.57 0.504
3.	The primary functions include sensory, motor, and cognitive is performed by:	1.09 0.292	1.09 0.292	1.24 0.435	1.03 0.183	1.37 0.49	1.2 0.407
4.	The largest lobes of the brain which control voluntary function such as, motor, cognitive (memory, orientation, judgment, arithmetic, insight, and abstraction extended to expressive written and language verbal is:	1.55 0.506	1.42 0.502	1.55 0.506	1.5 0.509	1.97 0.183	1.67 0.479
5.	The lobe concerned with the sensory functions which includes association of sensory information; awareness of body parts; interpretation of touch, pressure, and pain is	1.45 0.506	1.39 0.496	1.36 0.489	1.3 0.466	1.9 0.305	1.43 0.504
6.	Verbal memory, visual memory such as: interpreting the emotions, understanding language, and reactions of others are coordinate by the	1.27 0.452	1.33 0.479	1.27 0.452	1.37 0.49	1.8 0.407	1.47 0.507
7.	Located in the back of the brain, below the occipital lobes involved with motor skills, which refers to the coordination of finer, or smaller, movements, especially those involving the feet and hands is referred to:	1.42 0.502	1.45 0.506	1.45 0.506	1.4 0.498	1.48 0.509	1.33 0.479
8.	The immediate coma caused by destruction of the	1.33 0.479	1.3 0.467	1.39 0.496	1.4 0.498	1.8 0.407	1.6 0.498
9.	Deep Coma my due to small lesions developed in the	1.24 0.435	1.3 0.467	1.33 0.479	1.27 0.45	1.7 0.466	1.53 0.507
General mean and SD		1.42 0.229	1.38 0.193	1.45 0.184	1.38 0.103	1.74 0.200	1.52 0.201
Assessment		poor	poor	poor	poor	good	good
N		33	33	33	30	30	30
Mean of score (1.5), equal or more than 1.5 mean good, less than 1.5 mean poor							

Table 4: Responses of the study sample (both group) related to their knowledge regarding basic communication principals

N	Items	Control			Interventional		
		Pre	Post1	Post2	pre	Post1	Post2
		M// SD	M// SD	M// SD	M// SD	M// SD	M// SD
	Verbal communication is essential part of	1.48 0.508	1.52 0.508	1.52 0.508	1.43 0.504	1.57 0.504	1.50 0.509
	The nurse should be maintaining communication with the unconscious patient during	1.85 0.364	1.45 0.506	1.48 0.508	1.73 0.45	1.87 0.346	1.93 0.254
	Master of all senses is	1.33 0.479	1.30 0.467	1.27 0.452	1.47 0.507	1.73 0.450	1.70 0.466
	The nurse used task touch during caring out their work with the patients such kind of touch mean	1.73 0.452	1.76 0.435	1.61 0.496	1.63 0.49	1.43 0.504	1.40 0.498
	One of the following actions will promote recovery of the unconscious patient	1.67 0.479	1.73 0.452	1.70 0.467	1.73 0.45	1.93 0.254	1.97 0.183
	The dynamic process which used to gather data, teach and persuade, express caring and comfort is:	1.48 0.508	1.55 0.506	1.48 0.508	1.43 0.504	1.83 0.384	1.77 0.430
	When the nurses provide care for patients during direct contact which made there be close with 0 to 1 1/2 feet from the patient, this distance referred to	1.3 0.467	1.21 0.415	1.18 0.392	1.27 0.45	1.97 0.183	1.57 0.504
	Before the initial face-to-face contact, the nurse may get information such as the patient's name, age, address, medical history, and/or social background, which consider as the……..communication phase.	1.3 0.467	1.30 0.467	1.27 0.452	1.3 0.466	1.80 0.407	1.57 0.504
	Interaction between a health care provider and a patient that enhances the patient's comfort, trust, safety, and well-being is referred to:	1.3 0.467	1.27 0.452	1.21 0.415	1.3 0.466	1.83 0.379	1.63 0.490
	The essential core of the patient care is	1.21 0.415	1.30 0.467	1.24 0.435	1.33 0.479	1.97 0.183	1.87 0.346
	Two- way process in communication may use as an essential part to reduce the patient anxiety and emotional stimulation, through sending message understanding and feedback this referrer to	1.61 0.496	1.58 0.502	1.64 0.489	1.57 0.504	1.77 0.430	1.80 0.407
	Body language which includes gestures, postures, touch and physical appearance referred to	1.64 0.489	1.61 0.496	1.70 0.467	1.7 0.466	1.83 0.379	1.77 0.430
General mean and SD		1.49 0.206	1.46 0.184	1.44 0.195	1.49 0.175	1.79 0.158	1.71 0.176
Assessment		poor	poor	poor	poor	good	good
N		33	33	33	30	30	30
Mean of score (1.5), equal or more than 1.5 mean good, less than 1.5 mean poor							

Table 5: Responses of the study sample (both group) related to their knowledge regarding therapeutic and non-therapeutic communication							
N	Items	Control			Interventional		
		P re	Post1	Post2	pre	Post1	Post2
		M// SD	M// SD	M// SD	M//SD	M//SD	M// SD
	Many factors contribute as barriers of therapeutic communication such as	1.33 0.479	1.18 0.392	1.21 0.415	1.33 0.479	1.76 0.435	1.53 0.507
	One of the goals of therapeutic communication is	1.55 0.506	1.3 0.467	1.33 0.479	1.30 0.466	1.67 0.479	1.5 0.509
	Non-therapeutic communication techniques include the following	1.27 0.452	1.45 0.506	1.39 0.496	1.37 0.490	1.60 0.498	1.53 0.507
	Is it considered as one strategy of a therapeutic communication	1.06 0.242	1.24 0.435	1.21 0.415	1.23 0.430	1.90 0.305	1.63 0.49
General mean and SD		1.30 0.120	1.29 0.115	1.29 0.090	1.31 0.056	1.73 0.129	1.54 0.056
Assessment		poor	poor	poor	poor	good	good
N		33	33	33	30	30	30
Mean of score (1.5), equal or more than 1.5 mean good, less than 1.5 mean poor							

Table 6: Responses of the study sample (both group) related to their knowledge regarding educating the patient's family							
N	Items	Control			Interventional		
		Pre	Post1	Post2	pre	Post1	Post2
		M// SD	M// SD	M// SD	M// SD	M// SD	M// SD
	The nurse should advise the families of unconscious patients to	1.00 0.000	1.18 0.392	1.12 0.331	1.2 0.407	1.77 0.43	1.70 0.466
	It is important to encourage the patient's family and friends to remain positive when visiting their unconscious patient because	1.70 0.467	1.48 0.508	1.61 0.496	1.73 0.45	2 0	2.00 0.000
	Visiting the family of the unconscious patient my stimulated (auditory,emotional and tactile) senses as	1.36 0.489	1.12 0.331	1.21 0.415	1.5 0.509	2 0	2.00 0.000
General mean and SD		1.35 0.348	1.26 0.192	1.31 0.260	1.47 0.265	1.92 0.132	1.90 0.173
assessment		poor	poor	poor	poor	good	good
N		33	33	33	30	30	30
Mean of score (1.5), equal or more than 1.5 mean good, less than 1.5 mean poor							

3. Discussion

Part I: The demographical data of study sample

The result that presented in table (1) show the equivalence of the study sample (both group) in their demographical characteristics as most of participants 16(48.5%) and 19(63.3%) in both groups were between (24-26) years old, 18(54.5%), 19(63.3%) were male, most of them bachelor holder, related to their marital status 17(51.5%) in the control group were married, while 17(56.7%) in the interventional group were single. These results agree with a study which carried out on critical care unit nurses in st. John's medical college hospital the results revealed that the majority of the nurses (92%) between (22-29) years old (Thomas, D, 2006). Ayuso-Murillo, D., et al., 2017, found that most of the nurses who work in the critical care unit were female (89.6%), who find that female nurses have well skills than male when it comes to listening to professional and personal problems, in addition to making good environment that promotes exchange, participation and communication. Na'el K, A., & Mohammed, W. K, 2019, found that most of the ICU nurses who provide direct care for patients in Al- Hilla teaching hospital were male, because of long time duty and overload hardworking made the female nurses prefer to work in the general units. The result in table (1) goes a line with the study which carried out to evaluate the effects of humanistic knowledge and communication skills on professional quality of life in the critical care unit nurses, the study found out that most of the nurses (77.6%) were single and (77.7%) were with bachelor education (CHO, G. Y., et al., 2020).

Part two: Employment information

Table (2) showed that the most of the control group members 17(51.5%) were with (2-5) years of experience in the ICU, 22(73.3%) of interventional group were within one and less than one year of experience in the ICU. All the participant(both group) didn't attend any specific course related to communication skill with unconscious patients, 30(90.9%), 23(76.7%).

This finding go a line with Dawood, H. A., & Hassan, H. S., 2018, who demonstrated in their quoin 2 experimental study that the years of nurses experience in the ICU was (62.5%) and (56%) were between (1-5) years in both group. While most nurses in the CCU recorded between (1-5) years of experience.

Most of hospitals prefer to assign your nursing to work in the critical care unit related to working overload and multiple responsibilities which can be carried by them easily.

Part three: knowledge of nurses related to unconscious patient communication

Table (3) presented that the responses of the participants in both groups recorded poor in level related to their knowledge to anatomy and physiology of the nervous system in their pretest, during the two posttest the control group responses recorded poor level clearly, while the nurses who attend the educational program session recorded significant improvement in their two posttests.

Our result agrees with Thomas, D. (2006, who Find that the pretest of the nurses related to the anatomy for the CNS show unsatisfactory level, the nurses knowledge recorded high mean score in their posttest, which indicate the effectiveness of the training program.

Table (4) Responses of the study sample related to their knowledge regarding basic communication principals. This table shows that the pretest of both study group recorded unsatisfied level of knowledge related to basic communication principles with the unconscious patients as (1.49 _+ 0.206), (1.49 _+ 0.175). Also the post test of the control group shows the same poor level, while the nurses who attend the educational program session recorded significant improvement in their two posttest as (1.79_+0.158) and (1.71_+ 0.176), this indicated the effectiveness of the content of the educational program related to this issue, this change stand after the presentation of the educational program sessions.

This results supported by Khatib Zanjani, N.,and Moharreri, M, 2012, who carried out a study to "assess the nurses' knowledge and awareness of effective verbal communication skills", in Iran they find out that nurses knowledge related to verbal communication skills recorded poor level, the finding recorded only (36%) of them shows interest related to listening skill. Every day conversation sharing information explain emotions consider a cornerstone in nursing practice (Khatib Zanjani, N., and Moharreri, M, 2012).

A study entitled "Effect of the planned therapeutic communication program on therapeutic communication skills of pediatric nurses" in Egypt revealed that pretest and posttest knowledge of nurses in therapeutic communication about the Basic elements of communication process shows that more than (53.8%) of nurses with poor knowledge in pretest while posttest show that more than (62.9%) increase their knowledge about therapeutic communication, Following the implementation of a designed therapeutic communication program, the pediatric nurses skills and knowledge in therapeutic communication with the child patients in hospitalize improved significantly, for this reason they recommendation that pediatric nurses should continue to use programs about therapeutic communication to create trust, foster, healthy interactions, safe and assistance in the recovery of the children in the hospitals (Younis, J. R., et al., 2015).

Table (5) Responses of the study sample(both group) related to their knowledge regarding therapeutic and non-therapeutic communication.

The finding in table (5) shows that the pretest of both study group recorded unsatisfied level of knowledge related to therapeutic and non-therapeutic communication skills with the unconscious patients as (1.30 _+ 0.120), (1.31 _+ 0.056). During the posttest the results didn't show any change for control group, while the nurses who attend the educational program session recorded significant change through their two posttest as(1.73_+0.129) and (1.54_+ 0.056). This finding indicated that the educational program sessions it positively and improve the nurses knowledge.

This finding was supported by Prasad, V., & George, S. 2014, who find that the majority of staff nurses (92 %) had inadequate knowledge regarding therapeutic communication on pre-test, whereas (8%) of them had average knowledge.

This result also goes a line with Yoo HJ, et al., 2020, whom revealed that communication and nursing are related communication is difficult when caring for patient in critical care unit, the therapeutic communication consider essential for the patients' and their families' well-being. In a critical care unit, communication foundation of trust and experience is a crucial factor in enhancing patients' perceptions of their illnesses.

Table (6) shows that the pretest of both study group recorded unsatisfied level of knowledge related to family communication principles which may use with unconscious patient, as (1.35 _+ 0.348), (1.47 _+ 0.265). During the posttest the control group shows knowledge deficit, while the nurses who attend the educational program session recorded significant improvement in through their two posttests as (1.92_+0.132) and (1.90_+ 0.173). this finding cleanly indicated the effectiveness of the education program sessions on the nurse's knowledge.

According to Yoo HJ, et al., 2020, families of severely ill patients are fearful and anxious about their loved ones' health, and they want to save them. As a result, nurses must take this into account while interacting with vulnerable patients and their families, as well as aggressively identify and treat sources of discomfort in patients on mechanical breathing (e.g., using suitable sedatives/ analgesics and disconnecting the ventilator). Furthermore, according to the review, the electronic communication devices allow for effective communication with critically sick patients by eye blinks or touch.

Kynoch K, et al 2016, suggested that communication interventions improve parental participation in caring for the ICU patient, facilitate their decision-making abilities, and enhance their interactions with medical staff.

4. Conclusion

A significant difference found among interventional group members through the first and second post- test, the content of the education program act as a positive factor to improve the knowledge

5. Recommendation

Establish continuous educational sessions to enhance nurses' knowledge toward communication principles, strategies to communication with these patients as a tool to provide optimal care for the patient

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