

NURSES AWARENESS REGARDING CLINICAL HANDOVER AMONG CRITICAL CARE NURSES IN ALMEK NIMER UNIVERSITY HOSPITAL –RIVER NILE STATE - SUDAN**Us. Abdalrhman Akasha Abdalrhman¹, Dr. Higazi Mohammed Ahmed Abdallah*², Dr. Amna Omer Abdalrhman³**¹Clinical Instructor-Alghad Interantional Collage for Applied Medical Sciences -KSA.²Associate Professor of Medical Surgical Nursing –Shendi University – Sudan.³Assistant Professor of Medical Surgical Nursing –Shendi University – Sudan.***Corresponding Author: Dr. Higazi Mohammed Ahmed Abdallah**

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Article Received on 11/11/2019

Article Revised on 30/11/2019

Article Accepted on 21/12/2019

ABSTRACT

Background: Clinical handover involves the transfer of accountability and responsibility of clinical information from one health professional to another. The main role of clinical handover is to transmit accurate, relevant and current details about the patients' care, treatment, health service needs, clinical assessment monitoring and evaluation, and goal planning.^[4] **Objective:** To assess nurses awareness about clinical handover among critical care nurses. **Methods:** this was descriptive across-sectional study, conducted in Elmek Nimer hospital among nurses work in intensive care unit. The data was collected by close ended questionnaire which composed (18question) and it is analysis by SPSS vision (20). **Result and conclusion:** Result conducted that all most (90%) of study group had good knowledge about elements of handover also majority (76.7%) of them had fair knowledge about barriers to effective communication and majority (83.3%) of them had good knowledge about Transfer of patient, patient satisfaction during change of duty and (73.3%) had fair knowledge about type of teaching points.

KEY WORDS: clinical – handover – critical – nurse – knowledge.**INTRODUCTION**

Background: Globally, patient handover has caused alarm with a link between poor communication and sentinel events. Ron Paterson, Health and Disability Commissioner, found grave flaws in the care a 50 year old man received at Wellington Hospital prior to his death, and linked some of the condemnation to the Registered Nurse who failed to monitor the patient's condition adequately, and gave an inadequate handover to the night staff. It was highlighted that national collaboration is needed stating standardized handovers of both nursing and medicine are a priority. Safety of Patients in New Zealand Hospitals: A Progress Report showed that handover practices and the information that was handed over ranged widely with no consistency of practice.^[1] There are many methods of formal nursing handover including verbal, tape recorded, beside handover and written. There are also a variety of environments for handover delivery to take place, these being bedside, and office or staff room.^[1] Sometime called clinical (handoff) refers to the transfer of responsibility and accountability can only be transferred when responsibility is accepted by designated individual clinician or clinical team as out lined is the policy of the health care of organization the point at which

responsibility is transferred and accepted needs to be agree between both departments patients.

Accurate and timely communication of vital information between professional registered nurses is essential to assure patient safety. One of the most important times for nurse-to-nurse communication is during the shift handoff when information is exchanged and the responsibility of care for the patient is transferred.^[2] Sharing of pertinent information during nursing shift handoff provides for continuity of care, promotion of safety, and the elimination of preventable errors. According to The Joint Commission (TJC), the key objective of a handoff is to convey accurate care, treatment, and service information to the oncoming health professional. Current condition and any recent or anticipated changes should be included. Yet, communication errors, including errors during shift handoff, still account for more than 70% of sentinel events that occur in the provision of healthcare in the acute care setting. Unfortunately, each shift handoff presents distinct possibilities for error that can adversely affect a patient's hospitalization, safety, and the quality of patient care outcomes.^[3]

Clinical handover involves the transfer of accountability and responsibility of clinical information from one health professional to another. The main role of clinical handover is to transmit accurate, relevant and current details about the patients' care, treatment, health service needs, clinical assessment monitoring and evaluation, and goal planning. Inefficiencies of communication at clinical handover have been associated with irrelevant, missing or repetitive information, which can result in health professionals spending extensive periods attempting to retrieve relevant and correct information.^[4]

The aim of this exploratory study was to examine the perceptions and experiences of health professionals of different disciplines about clinical handover. We explored their opinions of how clinical handover functioned and how it could be improved. More specifically, we sought health professionals' perspectives about handover effectiveness; patient and family involvement in bedside handovers; confirming understanding, clarifying information and delivering information at clinical handover; role modeling behavior; training needs for health professionals; the nature and reporting of adverse events and suggestions for improving handover processes. The knowledge gained can provide further insight into the ability of health professions to develop local improvements in handover. The study also serves as a valuable input for patient safety policies and standards for clinical handover practices.^[4]

Justification: Handover is inevitable and essential due to shift working patterns in critical care units. Clinical handover between shifts is a high risk activity for patient safety. Critical information of each patient should be transferred effectively and correctly in order to maintain continuity of care despite change in shift among medical and nursing offices.^[22] Ineffective handover can cause major problems relating to lack of delivery of appropriate care and the possibility of misuse or poor utilization of resources, Clinical handover practices are recognized as being an essential component in the effective transfer of clinical care between health practitioners. It is recognized that the point where a patient is 'handed over' from one clinician to another is significant in maintaining continuity of care and that doing this poorly can have significant safety issues for the patient.^[21]

General Objective

To assess nurses awareness about clinical handover among critical care nurses.

Specific Objectives

- 1- To identify nurses level of knowledge about elements of handover.
- 2- To identify nurse's level of knowledge about barriers that prevents nurses to apply clinical handover.
- 3- To assess nurses level of knowledge about their role in clinical handover.

MATERIAL AND METHODOLOGY

Study design

This study was descriptive cross sectional hospital based study done during the period from March to July 2017. Aim To assess nurses awareness about clinical handover among critical care nurses in almek nimer university hospital.

Study area

The study area is Elmek Nimer university hospital at Shendi city, River Nile State, Sudan, Shendi town is located north of Khartoum, about 176 km. and 110 km south to Elddamer, the capital of River Nile State, and Shendi town is lies on the eastern bank of the River Nile with a total area about 14596 Km². The total population of Shendi locality is estimated at about 197589 of whom 116713 live in rural areas and 80876 in urban centers, most of them are farmers. Shendi University was established in the early 1990s and stands as a landmark institution in Higher Education. The town considered as center of Galieen tribe and some other tribes. There are different centers for general services; Shendi has two big hospitals, the teaching hospital, and Elmek Nimer university hospital.

Study Setting

This study was carried out at Elmek nimer university hospital. This hospital was established since 2002. It is the second university hospital in Sudan. The hospital provides most types of medical services (medicine, surgery, Obstetric and Gynecological, pediatric and outpatient clinics complex). Beside these there are cardiac, renal). In this hospital there is a big theater complex in which most type of general operations are done. In addition to these, some of special surgery (Ophthalmic and laparoscopic surgery) are also performed in this theater complex. the outpatient provide patients follow up and medical consultation for many department including(medicine, surgery, Obstetric and Gynecological, pediatric and recent ophthalmology outpatient clinics.

Study population

The population of this study was constituted all nurse whom working in the critical unit (ICU,CCU), available in the above setting in the time of the study and mach the criteria of the sample. The estimated number thirty nurse.

Exclusion criteria

All nurse whom in holyday are exclusion and training nurse.

3.5. Sample Size and Sampling technique

3.5.1. Sample Size

Thirty nurses were enrolled in the study

Site of work	Staff number
ICU	17
CCU	13

3.5.2. Sampling technique

Total coverage sampling.

3.6. Data collection tools

Self administer questionnaire ended questions composed of (18) questions.-Part one: questions from 1-3 about occupational data. Including (Level of qualification, site of work and years of experience).part Part two: questions from 4-18 knowledge about handover.

3.7. Data collection technique

Within three weeks during morning and afternoon shift, nurse interviewed by the researcher, no one refuse the participate and inform the information should be confidential and used for the purpose of the study only.

3.8. Data analysis

The data was coded by using master sheet then analyzed mainly by using simple estistical technique then by using soft ware computer program (SPSS version20).

-Deferent estistical measure was used (frequency, percentage, cohitest).

-B value was considered signified if less than (0.05), then present in form for table and figure.

3.9. Ethical consideration

To conduct the study the permission and the approval of the directors of the hospital was taken through the Dean of the Faculty of nursing. Permission was taken from hospital general manager and from the nursing headquarters (matron) and the manger of critical care unit. The purpose of study was explained to each one of participants. And the researcher assured them that the data collected from the questionnaire will be remaining confidential and it's not allowed for any person to identify it. Responders were informed that they could refuse to participate in the study, and withdraw from it at any time.

RESULT

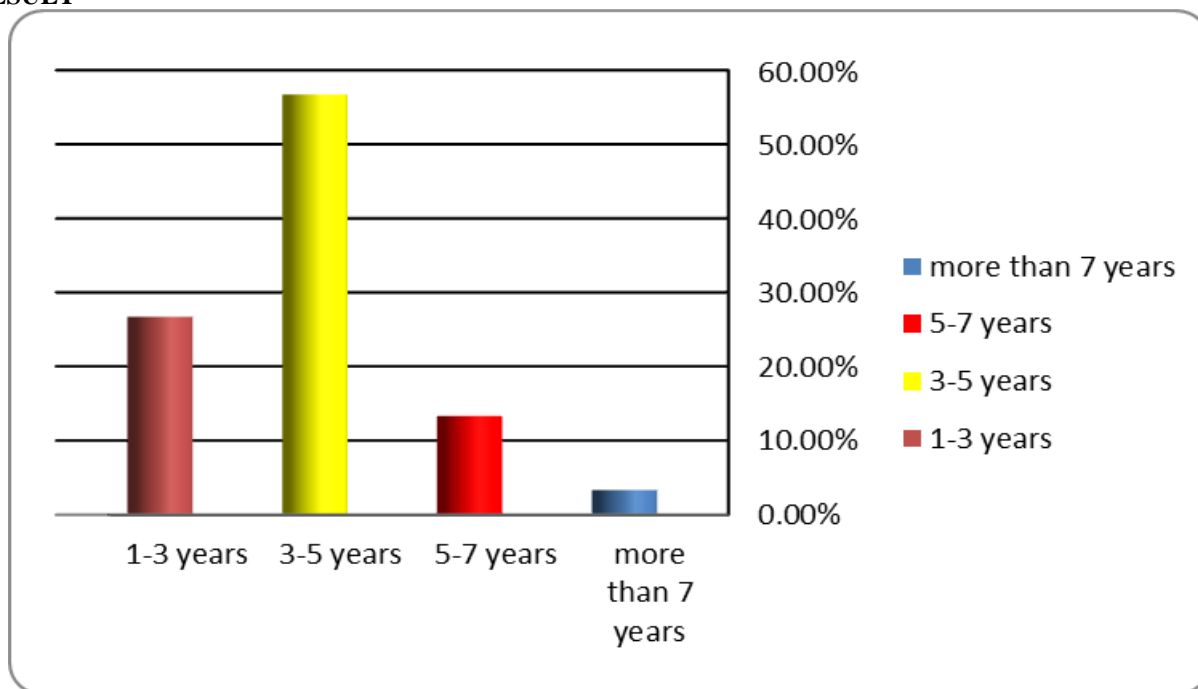


Figure (1): Distribution of study group according to their years of experience N=(30).

Table (1): Distribution of study group according to their level of knowledge regarding essential information about handover N= (30).

Items	Level of knowledge					
	Good		Fair		Poor	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Definition of hand over	25	83.3%	2	6.7%	3	10%
Importance of hand over	7	23.3%	18	60%	5	16.7%
Information required during handover	15	5%	13	43.3%	2	6.7%
Elements of handover	27	90%	0	0.0%	3	10%
Content of handover	18	60%	8	26.7%	4	13.3%

The above table clarified that (83.3%) of study groups had good knowledge about meaning of handover, also (60%) of them had fair knowledge about importance of handover,(43.3%) of them had fair knowledge about

Information required during handover while (90%) of them had good knowledge about elements of handover and (60%) of them had good knowledge about Content of handover.

Table (2): Distribution of study group according to their level of knowledge regarding method of communication in handover N= (30).

Items	Level of knowledge					
	Good		Fair		Poor	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Documentation require for telephone report	17	56.7%	10	33.3%	3	10%
Barriers to effective communication	5	16.7%	23	76.7%	2	6.7%
Indication for telephone and verbal orders	9	30%	20	66.7%	1	3.3%

The above table explained that (56.7%) of study groups had good knowledge about documentation require for telephone report, also (76.7%) of them had fair

knowledge about barriers to effective communication and (66.7%) of them had fair knowledge about Indication for telephone and verbal orders.

Table (3): Distribution of study group according to their level of knowledge regarding patient role and needs before handover N= (30).

Items	Level of knowledge					
	good		Fair		Poor	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Transfer of patient	25	83.3%	1	3.3%	4	13.3%
Patient satisfaction during change of duty	55	83.3%	2	6.7%	3	10%
Type of teaching points	3	10%	22	73.3%	5	16.7%

The above table showed that (83.3%) of study groups had good knowledge about Transfer of patient, also (83.3%) of them had good knowledge about patient

satisfaction during change of duty and (73.3%) of them had fair knowledge about type of teaching points.

Table (4): Distribution of study group according to their satisfaction with the overall handover process N= (30).

Level of satisfaction					
Satisfied		Neutral		Not satisfied	
Number	Percentage	Number	Percentage	Number	Percentage
18	60%	9	30%	3	10%

The above table clarified that (60%) of study groups had Satisfied with the overall handover process and (30%) of

them were neutral Satisfied with the overall handover process.

Table (5): Cross tabulation between level of qualification and knowledge of study group about definition of clinical handover: N=(30).

			definition	Of hand	over	Total	Value
			Good	Fair	Poor		
Level of qualification	Diploma	Count	6	0	0	6	.702
		% of Total	20%	0.0%	0.0%	20%	
	bachelor	Count	17	2	3	22	
		% of Total	56.7%	6.7%	10%	73.3%	
	post graduate	Count	2	0	0	2	
		% of Total	6.7%	0.0%	0.0%	6.7%	
Total		Count	25	2	3	30	
		% of Total	83.3%	6.7%	10.0%	100.0%	

P value highly significant = 0.00

P value significant <0.05

P value not significant >0.05

Table (6): Cross tabulation between level of qualification and knowledge of study group about importance of clinical handover: N=(30).

			The	Importance		Total	Value
			Good	Fair	Poor		
Level of qualification	Diploma	Count	0	5	1	6	0.253
		% of Total	0.0%	16.7%	3.3%	20%	
	bachelor	Count	6	13	3	22	
		% of Total	20%	43.3%	10%	73.3%	
	post graduate	Count	1	0	1	2	
		% of Total	3.3%	0.0%	3.3%	6.7%	
Total		Count	7	18	5	30	
		% of Total	23.3%	60%	16.7%	100%	

P value highly significant = 0.00 P value significant <0.05

Table (7): Cross tabulation between years of experience and knowledge of study group about definition of clinical handover: N=(30).

			Definition	Of hand	over	Total	Value
			Good	Fair	Poor		
Years of Experience	1-3 years	Count	5	1	2	8	.680
		% of Total	16.7%	3.3%	6.7%	26.7%	
	3-5 years	Count	15	1	1	17	
		% of Total	50%	3.3%	3.3%	56.7%	
	5-7 years	Count	4	0	0	4	
		% of Total	13.3%	0.0%	0.0%	13.3%	
	more than 7 years	Count	1	0	0	1	
		% of Total	3.3%	0.0%	0.0%	3.3%	
Total		Count	25	2	3	30	
		% of Total	83.3%	6.7%	10%	100%	

P value highly significant = 0.00 P value significant <0.05

Table (8): Cross tabulation between years of experience and knowledge of study group about importance of clinical handover: N=(30).

			Importance	Of hand	over	Total	Value	
			Good	Fair	Poor			
Years of Experience	1-3 years	Count	1	5	2	8	.687	
		% of Total	3.3%	16.7%	6.7%	26.7%		
	3-5 years	Count	4	11	2	17		
		% of Total	13.3%	36.7%	6.7%	56.7%		
	5-7 years	Count	2	1	1	4		
		% of Total	6.7%	3.3%	3.3%	13.3%		
	more than 7 years	Count	0	1	0	1		
		% of Total	0.0%	3.3%	0.0%	3.3%		
	Total		Count	7	18	5		30
			% of Total	23.3%	60%	16.7%		100%

P value highly significant = 0.00 P value significant <0.05

5.0. DISCUSSION

Handover is described as “the transfer of professional responsibility and accountability for some or all aspects of care for a patient, or group of patients, to another person or professional group on a temporary or permanent basis, The formal part of handover is transferring patient care and responsibility from one nurse to another thus enabling the nurse to deliver safe and ultimately quality nursing care.^[1]

The result of this study represented that majority (73.3%) of study group have bachelor degree, more than half (53.3%) of them worked in CCU and more than half

(56.7%) of them their experience range between (5-7) years.

Regarding knowledge about essential information of handover the result reflected that majority (83.3%) of study groups had good knowledge about meaning of handover, also less than tow third (60%) of them had fair knowledge about importance of handover, less than half (43.3%) of them had fair knowledge about Information required during handover and all most (90%) of them had good knowledge about elements of handover while less than tow third (60%) of them had good knowledge about Content of handover.

According to their level of knowledge regarding method of communication in handover the result explained that more than half (56.7%) of study groups had good knowledge about documentation require for telephone report, also majority (76.7%) of them had fair knowledge about barriers to effective communication and more than tow third (66.7%) of them had fair knowledge about Indication for telephone and verbal report this result corresponding with literature review. "Electronic tools have been proposed amongst many other strategies to improve clinical handover. The underlying assumption of utilizing electronic tools to improve clinical handover and other clinical processes is that good clinical care can only be provided when the information is available at the right place at the right time".^[7]

Concerning to their level of knowledge regarding patient role and needs before handover the results showed that majority (83.3%) of study groups had good knowledge about Transfer of patient, also majority (83.3%) of them had good knowledge about patient satisfaction during change of duty this finding agree with literature review (Sharing of pertinent information during nursing shift handoff provides for continuity of care, promotion of safety, and the elimination of preventable errors)^[3] and majority (73.3%) of them had fair knowledge about type of teaching points.

As regard their study group level of knowledge about type of communication the result represented that majority (76.7%) of study groups had written communication this finding agree with literature review (Accurate and timely communication of vital information between professional registered nurses is essential to assure patient safety and information is exchanged and the responsibility of care for the patient is transferred).^[2]

Regarding their level of knowledge about face to face report the result showed that less than tow third (63.3%) of study groups had poor knowledge about face to face report, this result disagree with literature review "Face-to-face report may also take place in a designated room, nurses' station, or at the client's bedside. Written and tape-recorded reports are often briefer and less time consuming; however, verbal updates may be needed".^[8]

According to their level of performance about Apply bed side shift report the result explained that majority (73.3%) of study groups had sometimes apply bed side shift of shift-to-shift nursing reports this result agree with literature review "that reporting in the client rooms rather than at the nurses' station would improve client satisfaction and increase direct hours of client care and Bedside shift report also shown to build teamwork, ownership, and accountability in employees".^[10]

On the other hand the study represented that that less than tow third (60%) of study groups had Satisfied with the overall handover process. this result agree with

literature review (clinical handover is to transmit accurate, relevant and current details about the patients' care, treatment, health service needs, clinical assessment monitoring and evaluation, and goal planning).^[4]

CONCLUSION

- All most of study group had good knowledge about elements of handover, transfer of patient, and patient satisfaction during change of duty
- Majority of them had fair knowledge about barriers to effective communication and majority, and type of teaching points.

Recommendation

- Hospital manger facilities the resource such as (phone, tools, electronic device) to apply handover program in standard way.
- The head nurse should obligates the nurses for workshop to improve knowledge and skills of nurse about hand over
- Experimental research should be done about handover performed to improve knowledge ,importance ,and understanding of handover.

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