

Nurses' Hand Off-Its Role in Clinical Care Continuum

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Abstract- Nurses' Handoff is an essential part of nurses' day-to-day activity where a patient's identity, situation, background, assessment, and recommendations are being handed over from Nurse to Nurse, Nurse to Doctor, Nurse to other healthcare workers, who are involved in any vertical of patient's care. Nurses' Handoff gives support towards effective communication, it emphasizes the transfer of critical information and uninterrupted care of patients. Nurses Hand off – Its Role in Critical Care Continuum helps towards identifying ineffective communication, medication error, and other nursing process breaches. So the researcher has conducted a study based on the knowledge and awareness of nurses to what extent they are convinced about the clinical handoff- its benefits and its drawbacks in the clinical care continuum. A Quasi-experimental design was used to determine the effectiveness of clinical handoff among 300 nurses across the hospital. This study reveals that before delivering the knowledge and giving training to registered nurses 'the below-average awareness percentage is 29, an average percentage of 69.30, and 1% of RN's have scored above average. Hence, the implementation of training on the clinical handover process have made a difference in percentage as below average is 0%, the average is 32%, and 67% are above average. Therefore, it is proved that there is an increase in awareness percentage of 66 among Registered nurses after sharing knowledge and giving training to them.

Keywords: Nurses' Hand Off, Clinical Hand Over, Clinical Care Continuum.

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I. Introduction

Nurses Hand Off – Its Role in Clinical Care Continuum, the term itself tells us the importance of determining an effective handoff that supports the change over of critical information and continuum of care and treatment between healthcare team members, this critical transition point is known as handoff. Seada AM, Bayoumy SA. (2017)¹ the study states that it provides evidence on handoff educational program enhances nurses' interns' handoff communication competence¹. Every process has its highlights and challenges so the clinical Handoff otherwise plays a crucial vital element in the healthcare setup still, the highlights are the ISBAR toolkit which supports in exchange of information from one caregiver to another caregiver in a concise and documented manner. Lee DH, Lim EJ. (2021)² in their study state that patient handover is a type of indirect nursing care that requires high-level nursing competencies to make a comprehensive clinical decision The ISBAR toolkit is the real-time effective communication process of passing specific patient information from one health caregiver to another or from one team of caregivers to another to ensure the continuity and safety of the patient's care. Ghosh S, Ramamurthy L, Pottakat B (2021)³ study supports the impact of structured clinical handover protocol on communication and patient satisfaction, and that the standardization of clinical handover may reduce sentinel events due to inaccurate and ineffective communication³ and this is also stated in the study of Blondon K, Ehrler F, Le Godais S, Wojtasikiewicz JY, Couderc C (2017) to standardize both the process and content of handoff⁴. Handoff has its challenges too – Standardization of Process, Human Factor, Communication, Clinical factor, and system factor other obstacles like medication error, miscommunication, and adverse events faced during the nursing process to overcome all their barrier including time constraints, poor staffing, culture and language differences and lack of information.

Hence, the researcher has conducted a study based on the knowledge and awareness of nurses to what extent they are convinced about the clinical handoff- its benefits and drawbacks in the clinical care continuum. However, it was assumed that the registered nurse of critical care will be more qualified than the non-critical area nurse. Therefore, in the study of Sujanandam DK. Handoff communication: Hallmark of nurses. Indian Journal of Continuing Nursing Education. 2018 Jan 1; 19(1): 12⁵. states that "The transfer of professional responsibility and accountability for some or all aspects of care for a patient or group of patient, to another person or professional group on a temporary or a temporary or permanent basis known as

clinicalhandoff.

Types of Handoff

Handoff can occur in any setting of the health care organization. It can be a change of shifts, between different services, or to a different discipline.

According to Friesen, White, and Byers (2008), the types of handoff can be

- shift to shift
- nursing unit to nursing unit
- nursing unit to diagnostic area
- nursing unit to special areas
- discharge and inter-facility transfer

II. Assumptions

- ❖ It is assumed that registered nurses will have some knowledge about handoff.
- ❖ It is assumed that registered nurses will honestly respond to the questionnaire prepared by the investigator.
- ❖ An instructional module that will help the registered nurses to improve their knowledge of the topic

III. Objectives of the study-

- ❖ To assess the pre-test knowledge regarding handoff during shift change among registered nurses.
- ❖ To administer a structural teaching program regarding handoff skills of nurses during shift change among registered nurses.
- ❖ To assess the post-test knowledge regarding handoff skills of nurses during shift change among registered nurses.
- ❖ To find out the association between pre-test and post-test knowledge regarding handoff skills of nurses during shift change among registered nurses

IV. Methodology

The study was conducted at Apollo Medics Super Speciality Hospitals, Lucknow, Uttar Pradesh. This study was done for 3 months i.e. from October 2021 to December 2021. Prior to the commencement of this study a pilot study was conducted and it was found that the ISBAR Tool as feasible, appropriate, and practicable. The population for the study was the registered nurses who were available at the time of data collection at Apollo Medics Super Speciality Hospitals, Lucknow, Uttar Pradesh.

300 registered nurses were taken as a convenient sample. Data collection was done from the 11th of October to the 27th of December 2021. Analysis and interpretation of the data were made with the help of descriptive and inferential statistics. Nurses who are included in this study were working in direct patient care for example Inpatient Departments (ICU and Wards) and excluding the criteria of Emergency, Chemotherapy Department, Outpatient Department, Operation Theatre, Day Care, Dialysis, and other roles nurses like Infection Control Nurse, Charge Nurse, Quality Nurse, Nurse Educator.

This study was a Quasi-experimental design, where the study was done using pre-post evaluation through a structured questionnaire prepared to assess the competency regarding handoff skills of nurses during shift change. The tool was given for content validity to experts in the fields of nursing and medicine. The reliability of the tool was tested by the test and retest method. The Tool used for data collection was divided into three sections in which Section A contains 15 questions of 30 marks and each question scores 2 marks. Section B contains 20 questions of 40 marks. Section C contains 15 questions of 30 marks which counts as a total of 50 questions amounting to a total of 100 marks. The fact-finder has made the category to how can the knowledge be assessed, so scores are like Above Average – 66<. Average-31-65, Below Average- 0-30. Before initiation of the study ethical clearance was obtained from the Institutional Ethics Committee and Guidance was given by the Departmental Head of Nursing Services.

V. Result and Discussion

This study deals with the analysis and interpretation of data collected from the registered nurses. A Quasi-experimental design was adopted to determine the effectiveness of the structural questionnaire program. The research design had only one group. The test re-test method was used for testing the reliability of the tool. Data were analyzed using descriptive and inferential statistics. The analysis and interpretation were done in two parts.

Part I: Deals with the frequency and percentage distribution of critical and non-critical care registered nurses' knowledge regarding handoff skills of nurses during shift change.

Part-I

Figure 1: Frequency Distribution demographic characteristics of registered nurses on Nurses Handoff-Its role in clinical care continuum.

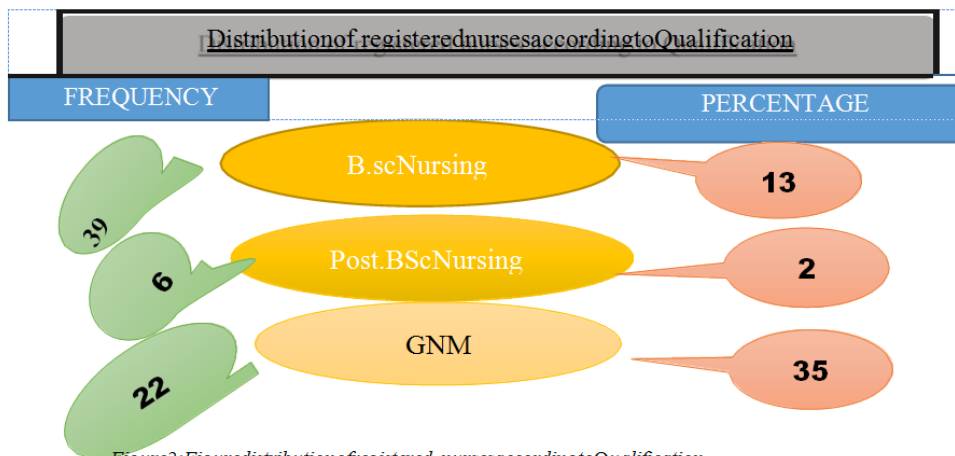
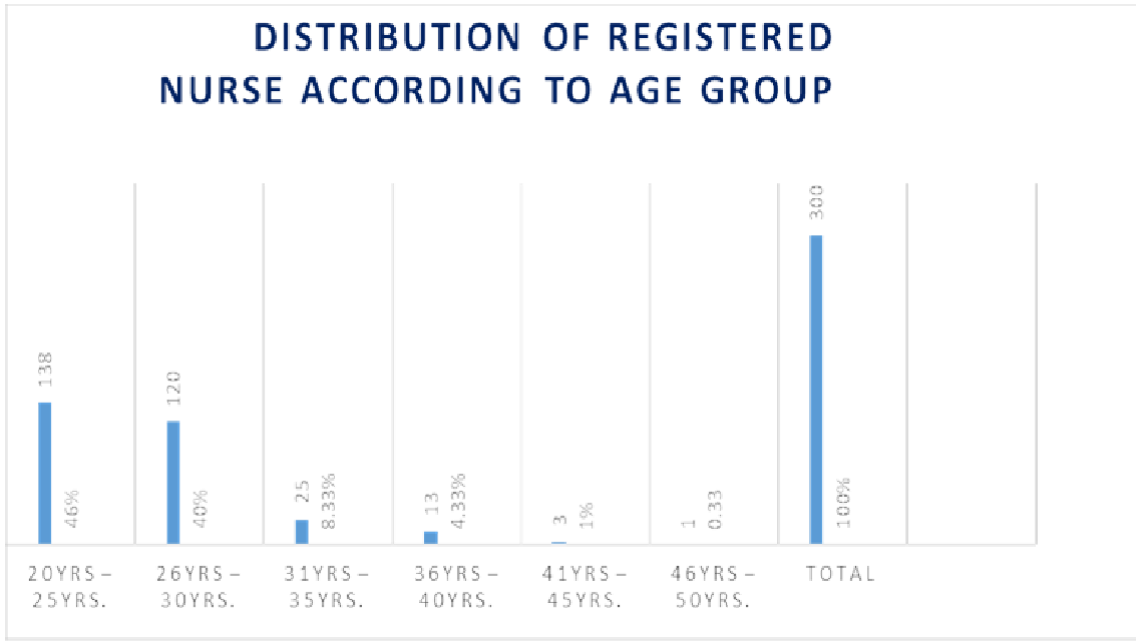


Figure 2: Figure distribution of registered nurses according to Qualification

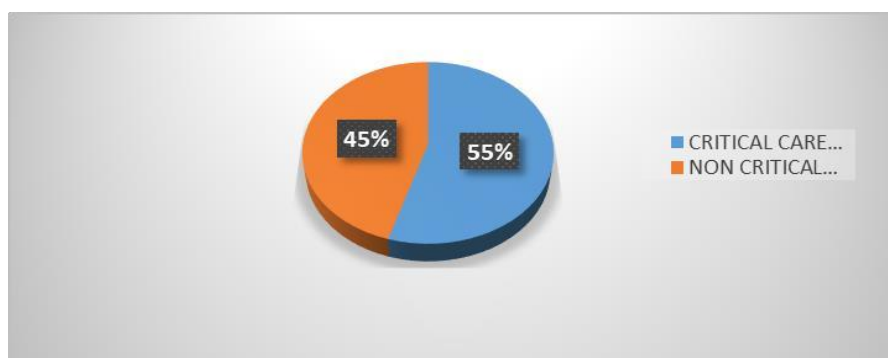


Figure 3: Frequency Distribution according to Department

Age	Frequency	Percentage
20-25yrs	138	46
26-30yrs	120	40
31-35yrs	25	8.33
36-40yrs	13	4.33
41-45yrs	3	1
46-50yrs	1	0.33
Total	300	100
Qualification	Frequency	Percentage
BSc. Nursing	39	13%
PostBScNursing	6	2%
GNM	255	85%
Total	300	100%
Departments	Frequency	Percentage
CriticalCareUnits.	164	54.66%
Non-CriticalCareUnits.	136	45.33%
Total	300	100%

Table-1-Frequencyofregisterednursesaccordingtotheagegroup

The above table shows that 46% of nurses were in the age group of 20yrs to 25yrs, 40% were from 26yrsto30yrs, 8.33% were from 31yrsto35yrs, 4.33% were in 36yrsto40yrs, 1% were from 41yrsto45yrs and 0.33% were in 46yrsto50yrs.

The above table also depicts that 13% are qualified for BSc. nursing, 2% are qualified with Post BScNursing and 85% are having a diploma in nursing (GNM).

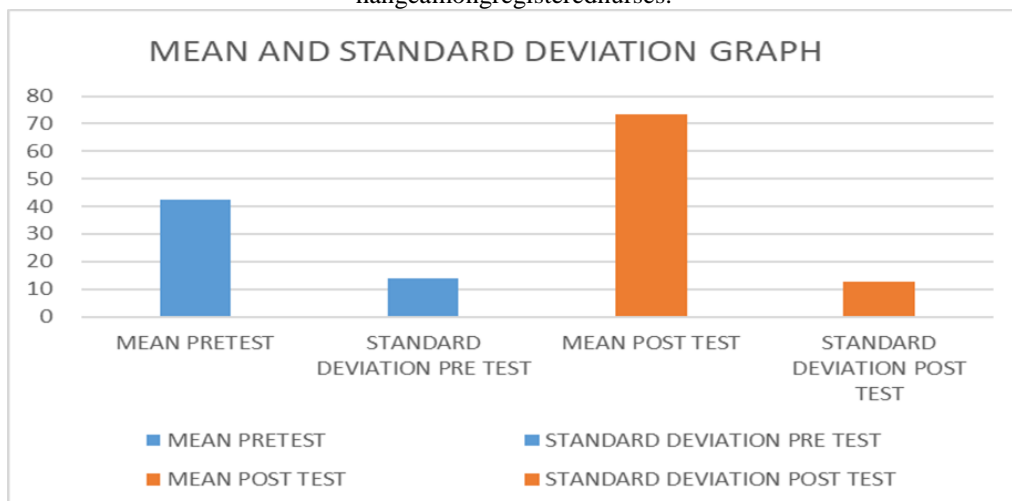
The above table shows that 54.66 % belongs to critical care unit and 45.33% belongs to non-critical care units.

Part-II

Deals with item-wisedistributionofpercentage, mean and standard deviation of knowledge sources on handoff skills of nurses during shift change among registered nurses.

Figure:4-

Distribution of percentage, the mean, and standard deviation of knowledge sources on handoff skills of nurses during shift change among registered nurses.



MEANPRE-TEST	42.44
STANDARDDEVIATIONPRE-TEST	14.06
MEANPOST-TEST	73.42
STANDARDDEVIATION POST-TEST	12.57

Table 2: Mean and standard deviation of knowledge sources on handoff skills of nurses during shift change among registered nurses'

Knowledge Level	Below Average(<33)	Average(34-66)	Above Average(>67)
Percentage Pre Test	29.30%	69.30%	1.30%
Frequency Pre Test	88	208	4
Percentage Post Test	0%	32.3%	67.7%
Frequency Post Test	0	97	203

Table 3: Percentage and frequency according to knowledge level on pre-test and post-test

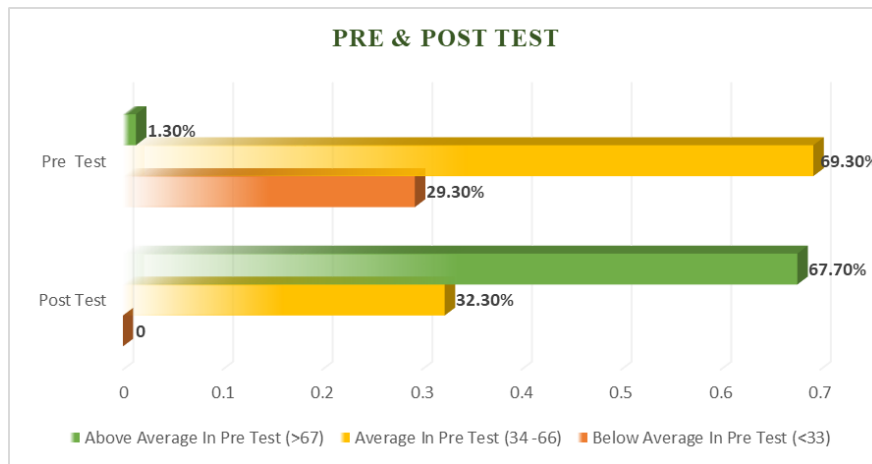


Figure 5: Percentage difference according to knowledge level on pre-test and post-test.

The above table 3 shows pre-test 29.30% were below average, 69.30% were average, and 1.30% were above average, and in the post-test, 0% were below average, 32.3% were average, and 67.7% were above average.

Discussion: The results of the study proved that, after introducing appropriate training, there is an increase of 66% of registered nurses who have gained excellent knowledge in the clinical handoff process whereas in the pre-test the awareness percentage of the same group was 1.30. It was also evidence that there was a decrease in error due to proper handoff process. Hence, implementing effective training and instilling the knowledge in reference to patient satisfaction and nurse's acceptance in improving the nursing handoff practices

Conclusion

This study is related to structured clinical handover protocol on communication and patient satisfaction that supports the need for standardization of the nursing handover process. This is achieved by incorporating the ISBAR tool which is effective in terms of sharing the knowledge and training in reference to patient satisfaction. It also adds value to nurses' acceptance of improving the nursing handover practices. In conclusion, this study can be used as a future reference as it emphasizes quality improvement of the handover process by standardizing it through ISBAR Tool.

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