

Staff Nurses' Performance Regarding Shift Report

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Abstract

Background: Shift report is crucial in achieving effective, safe, and high quality communication when the responsibility for the patient care is transferred from one nurse to another in effective manner. **Aim of study:** the study aimed at measuring the effect of shift report training program for nurses on quality of reporting. **Subjects and methods:** Design: Quasi-experimental research design was used. Setting: The study was conducted at Shoubra General Hospital which affiliated ministry of health hospitals. Subjects: 129 nurses and 50 head nurses were participated in the study. **Tools:** Three data collection tools were used to carry out this study namely, knowledge questionnaire sheet, Observational check list and Audit sheet. **Results:** No one of the staff nurses in the study sample had satisfactory total knowledge scores at the pre-intervention phase and 100% of them at the post-intervention and follow up phases. No one of the head nurses in the study sample had adequate total performance scores at the pre-intervention phase and reach 100% at the post- intervention phase, while the follow-up phase showed some declines, down to 70% in total performance scores. **Conclusion and recommendations:** Nurses' knowledge and performance regarding shift hand over and quality of report was improved after implementing the program. The study recommends Periodic assessment of head nurses and their staff for reporting skills. Regular implementation of training programs regarding shift report.

Keywords: Shift report, Staff Nurses, Performance.

Introduction

Reporting is the verbal communication of data regarding the client's health status, needs, treatments, outcomes, and responses. When a report is Given, it needs to summarize the current critical information That facilitates clinical decision making and continuity of care. Recording and reporting are based on the nursing process, standards of care, and legal and ethical principles. The nursing process provides structures for an organized report, a challenge inherent in verbal communication. In order to do efficient verbal communication and well organized report, the nurse must consider what needs to be said, why it needs to be said, how to

say it and what the expected outcomes are needed. Considering these aspects of; reporting before the communication happen will provide a concise, organized report (*Daniels et al., 2015*).

There are three patient-centered positive outcomes associated with nurse-to-nurse bedside shift report as patient empowerment, patient involvement and patient becoming an additional resource in diagnosis and treatment. Bedside shift reporting saves time and allows the incoming nurse to ask questions. The nurses begin to know patients at the beginning of the shift and doing assessments, so they can carry out their clinical care tasks. This also gives them

baseline knowledge of the patients so they can monitor changes or risks (*Byers et al., 2019*).

A bedside shift report reassures the patient that the nursing staff works as a team that everyone knows the plan of care. By working together, patients witness a safe, professional transfer of responsibilities; patients can ask questions, allowing the nurse and patient an opportunity to share information; and promotes involvement and improved satisfaction and patients' empowerment (*Anderson and Mangino, 2016*). Bedside shift report has been shown to empower nursing staff, improve patient involvement, and allow for a safe transition of care between providers. It establishes and promotes trusting relationships between patients and staff members, which serve as a foundation for teamwork (*Bettyanne, 2015*).

Continuing assessment of the patient's needs and conditions requires accurate documentation. This documentation helps promote the continuity of care given by nurses and other healthcare providers. Because one nurse cannot provide twenty-four hour coverage, significant information must be passed on to others through reports, nursing processes notes and care plans (*Berman et al., 2016*).

Through documentation, nurses, communicate to other nurses and care providers their assessments about the status of clients, nursing interventions that are carried out and the results of these interventions. Documentation of this information increases the likelihood that the client will receive consistent and informed care or service. Thorough, accurate documentation decreases the potential for

miscommunication and errors. While documentation is most often done by nurses and care(providers, there are situations where the client and ,family may document observations or care provided in order to communicate this information with members of the healthcare team (*Deng, et al., 2018*).

Documentation encourages nurses to, assess client progress and determine which interventions are effective and which are ineffective, and identify and document, changes to the plan of care as needed. Documentation can be a valuable source of data for making decisions about funding and resource management as well as facilitating nursing research; all of which have the potential, to improve the quality of nursing practice and client care (*Vrbnjak, et al., 2016*).

Significance of the study

Special emphasis on the hand-over procedures and nursing personnel must be acquainted with the different types of intra-departmental reports with periodic training and re-training to refresh nursing personnel knowledge. Actually, the observation of handoff among staff nurses during change of shifts in the study setting was inadequate and lead to lack of knowledge of incoming nurse about all information related to the patient (*Shazly, 2003*). Therefore, the present study was conducted to improve the intradepartmental

communication among nurses through providing evaluative feedback regarding their performance of shift report.

Aim of the study

The aim of this study is to assess staff nurses' performance regarding shift report

Subjects and Methods

Research design:

Descriptive research design was used in carrying out the current study.

Setting:

This study was conducted at Shoubra General Hospital which affiliated ministry of health hospitals. Total bed capacity is (200) bed. It consists of the following units and departments; medical department, surgical department, neonatal intensive care unit, intensive care unit, cardiac care unit, burn department, emergency department, obstetric and gynecological department, hemodialysis unit, pediatric department, and ten outpatient clinics.

Subjects:

The study subjects consisted of consisted 129 staff nurses out from 194 according this equation.

Data collection tools:

Two data collection tools were used to carry out this study namely, Observational check list, Audit sheet

1-An observational check list: It aimed to assess nurses' performance regarding shift report it developed by (*Shazly, 2003, Abd-Elal 2014 and Atef, 2015*). It covers three main domains namely;

1) pre report hand over preparation, 2) practice during the hand over procedure, and 3) hand over the department.

❖ Scoring system:

The observation scoring systems were "done" and "not done" which scored one and zero respectively. The scores of the items of each part were summed up and the total divided by the number of items, giving a mean score for the part. These scores were converted to percent score. Total score of nurses' performance regarding shift report considered adequate if total percent score was 60% or more and inadequate if the total percent score was less than 60%

3-Audit sheet: This sheet was aimed to assess quality of report. It adopted from (*Abed Elal 2014*). It included the criteria for shift report (11 items) and the content of shift report (20 items)

❖ Scoring system:

Nurses' response were; "present", or "not present" and scored one and zero respectively. The scores of the items were summed up and the total divided by the number of items, giving a mean score. These scores were converted to percent score. Total score accepted if total percent score was 60% or more and not accepted if the total percent score was less than 60%

Tools validity and reliability:

Face and content validity of the tools was assessed by jury group consisted of five experts in nursing administration in faculty of nursing at, (Ain shams, Cairo university and Shobra General Hospital). Jury group members judge tools for comprehensiveness, accuracy and clarity in

language. Based on their recommendation's correction, addition and/or omission of some items were done. Study tools were tested for its internal consistency by Cronbach's Alpha. It was 0.815 for the observation checklist.

Fieldwork:

Once official permissions were obtained, the fieldwork was started. The investigator met with the nursing director of the hospital to determine the suitable time to collect the data and confirm the days and times to assess staff nurses performance. The study was carried out through an assessment nurses' performance regarding shift report were assessed using the observation checklist. the observation checklist took from 30:45 minutes.

Administrative Design:

An approval to conduct the study was obtained from the Faculty of Nursing at Ain-Shams University, and from Shoubra General Hospital which affiliated ministry of health hospitals.

Ethical Considerations:

Prior study conduction, ethical approval was obtained from the scientific research ethical committee of the faculty of nursing, Ain Shams University. The investigator met both medical and nursing directors of the hospital where the nurses worked to clarify the aim of the study and take their approval. The researcher also met the study subjects to explain the purpose of the study and to obtain their approval to participate. They were reassured about the anonymity and confidentiality of the collected data, which was used only for the purpose of scientific research. The subjects'

right to withdraw from the study at any time was assured.

Statistical analysis:

Data entry and statistical analysis were done using (SPSS) statistical software package. Quality control was at the stage of coding and data entry. Data were presented using descriptive statistics in the form of frequencies and percentage for qualitative variables; mean and standard deviation for quantitative variable. Qualitative categorical variables were compared Chi-square (X²) test; the hypothesis that the row and column variables are independent, without indicating strength or direction of the relationship, Analysis of variance (ANOVA) test. Statistical significance was considered at (P-value <0.05).

Results:

Table (1): shows that 48.8% had more than 30 years, 85.3% were females and nearly two thirds of them 64.3% were married, 46.5% had technical institute diploma. 65.1% had 5 – 10 years of experience.

Table (2): indicates that there is incompetent nurses' performance that appeared low total mean scores of staff nurses' performance.

Table (3): indicates that there are incompetent nurses' audits scores that appeared low total mean scores of staff nurses.

Table (4): shows that, there was a highly statistically significant relation between staff nurses' total performance scores and their demographic characteristics that includes: ages, gender, marital status,

qualifications, experience, and attendance of training courses.

Table (5): shows that, there was a highly statistically significant relation between staff nurses' total audit scores and their demographic characteristics that includes: ages, gender, marital status,

qualifications, past experience, and attendance of training courses.

Table (6): shows that, there was a statistically significant correlation between nurses' total performance, and audit scores with p-value > 0.01.

Table (1): Demographic characteristics of staff nurses in the study sample (n=129).

| Demographic characteristics | No | % |
|----------------------------------|-----|------|
| 1. Age: | | |
| - <25 years | 53 | 41.1 |
| - 25-30 years | 13 | 10.1 |
| - >30 years | 63 | 48.8 |
| 2. Gender: | | |
| - Male | 19 | 14.7 |
| - Female | 110 | 85.3 |
| 3. Marital status: | | |
| - Single | 21 | 16.3 |
| - Married | 83 | 64.3 |
| - Widowed | 6 | 4.7 |
| - Divorced | 19 | 14.7 |
| 4. Nursing qualification: | | |
| - Bachelor of nursing science | 38 | 29.5 |
| - Technical institute diploma | 60 | 46.5 |
| - Diploma in nursing | 31 | 24 |
| 5. Years of Experience | | |
| - <5 years | 20 | 15.5 |
| - 5 – 10 years | 84 | 65.1 |
| - > 10 years | 25 | 19.4 |

Table (2): Distribution of staff nurses' total performance mean scores (n = 129).

| The main categories | No. of Items | Mean ±SD |
|----------------------------------|--------------|--------------------|
| Pre report hand over preparation | 6 | 1.6 ± 1.77 |
| Handover procedure | 45 | 18.2 ± 7.51 |
| Handover the department | 8 | 4.3 ± 3.19 |
| Total performance | 59 | 23.7 ± 8.46 |

Table (3): Distribution of staff nurses' total audit mean scores (n = 129).

| Total audit mean scores | No. of Items | Mean ±SD |
|------------------------------------|--------------|--------------------|
| Criteria of shift report | 11 | 3.7 ± 2.16 |
| Content about personal information | 7 | 3.2 ± 1.77 |
| Content about nursing procedures | 13 | 5.2 ± 3.19 |
| Total audit scores | 31 | 12.3 ± 4.56 |

Table (4): The relation between demographic characteristics of staff nurses and their total performance scores.

| Demographic characteristics | Nurses' performance Mean \pm SD | Kruskal Wallis test | P-value |
|--------------------------------------|--------------------------------------|------------------------|---------|
| 1. Age: | | 6.57 | .000** |
| - <25 years | 26.23 \pm 8.33 | | |
| - 25-30 years | 19.32 \pm 7.88 | | |
| - >30 years | 22.36 \pm 1.09 | | |
| 2. Gender: | | 26.71 | .000** |
| - Male | 24.21 \pm 6.49 | | |
| - Female | 23.71 \pm 8.71 | | |
| 3. Marital status: | | 8.26 | .000** |
| - Single | 28.33 \pm 11.52 | | |
| - Married | 21.65 \pm 7.96 | | |
| - Widowed | 32.11 \pm 0.62 | | |
| - Divorced | 29.34 \pm 0.81 | | |
| 4. Nursing qualification: | | 4.83 | .000** |
| - Bachelor of nursing science | 23.71 \pm 7.29 | | |
| - Technical institute diploma | 22.72 \pm 8.03 | | |
| - Diploma in nursing | 23.44 \pm 5.19 | | |
| 5. Years of Experience | | 18.65 | .000** |
| - <5 years | 28.71 \pm 11.23 | | |
| - 5 – 10 years | 24.33 \pm 6.63 | | |
| - > 10 years | 23.15 \pm 8.42 | | |
| 6. Attending training courses | | 21.92 | .000** |
| - Yes | 23.53 \pm 3.15 | | |
| - No | 11.43 \pm 0.82 | | |

Table (5): The relation between demographic characteristics of staff nurses and their total audit scores.

| Demographic characteristics | Audit scores Mean \pm SD | Kruskal Wallis test | P-value |
|--------------------------------------|-------------------------------|------------------------|---------|
| 1. Age: | | 26.12 | .000** |
| - <25 years | 14.22 \pm 3.41 | | |
| - 25-30 years | 11.34 \pm 4.15 | | |
| - >30 years | 10.75 \pm 4.36 | | |
| 2. Gender: | | 12.43 | .000** |
| - Male | 13.75 \pm 1.31 | | |
| - Female | 11.82 \pm 4.81 | | |
| 3. Marital status: | | 10.39 | .000** |
| - Single | 11.23 \pm 1.44 | | |
| - Married | 10.83 \pm 5.41 | | |
| - Widowed | 15.01 \pm 0.531 | | |
| - Divorced | 14.56 \pm 1.35 | | |
| 4. Nursing qualification: | | 37.15 | .000** |
| - Bachelor of nursing science | 13.49 \pm 4.53 | | |
| - Technical institute diploma | 10.98 \pm 5.17 | | |
| - Diploma in nursing | 13.67 \pm 2.75 | | |
| 5. Years of Experience | | 13.56 | .000** |
| - <5 years | 12.41 \pm 0.82 | | |
| - 5 – 10 years | 11.32 \pm 5.33 | | |
| - > 10 years | 14.62 \pm 1.53 | | |
| 6. Attending training courses | | 18.72 | .000** |
| - Yes | 14.12 \pm 5.83 | | |
| - No | 11.74 \pm 0.83 | | |

Table (6): Correlation between staff nurses' total performance, audit scores.

| | | Total performance scores | Total audit scores |
|--------------------------|---------|--------------------------|--------------------|
| Total performance scores | R | 1 | |
| | p-value | - | |
| Total audit scores | R | 0.779 | 1 |
| | p-value | .000** | - |

(**) Highly statistically significant at $p < 0.01$

Discussion:

Nursing report is the official exchange of information between nurses in written or oral form at the end of each shift. Besides recording the written report of nurses, oral report is a communication method which its purpose is to transfer essential and key information about patients' medical care. As mentioned, one

of the practical reports of nurses is work shift delivery report when the responsible nurse for caring the patient provides the other nurses with a summary of patient's activities and condition at the time of leaving the unit to rest or deliver his or her shift (*Ghosh, et al., 2018*). So, the current study aimed to assess staff nurses' performance regarding shift report.

Regarding demographic characteristics of nurses, the current study revealed that nearly half of nurses had more than 30 years, majority of participants were females and nearly two thirds of them were married, nearly half of them had technical institute diploma. Nearly two thirds of the nurses had 5 – 10 years of experience. Also, two third of the nurses attended training courses.

This result was in agreement with *Inanloo, Mohammadi, & Haghani, (2017)* who found that the majority of

nurses were female, and married. Conversely, this result was in disagreement with *Ito, & Iijima, (2018)* who found that the majority of nurses had bachelor of nursing science, and their experience year were from 3 to 5 years.

Regarding nurses' total performance scores, the current study revealed that no one of the nurses in the study sample had satisfactory total performance scores. This result was in agreement with *Biondi, Dumay, & Monciardini, (2020)* who found that the minority of nurses had satisfactory performance during hand-over procedure. Also, this result was in agreement with *Buus, Hoeck, & Hamilton, (2017)* who found that majority of nurses had satisfactory performance during hand-over procedure.

Regarding nurses' total audit scores, the current study revealed that no one of the nurses in the study sample had satisfactory total audit scores. This result was supported with *Hajibabae, et al., (2014)* who found that the majority of nurses had unsatisfactory total audit scores. Also, this result was in agreement with *Waage, et al., (2014)* who found that the majority of nurses had satisfactory total audit scores.

Regarding relation between demographic characteristics of staff nurses and their total performance scores,

the current study revealed that there was a highly statistically significant relation between staff nurses' total performance scores and their demographic characteristics that includes: ages, gender, marital status, qualifications, past experience, and attendance of training courses.

This result was in agreement with *Ofori-Atta, Binienda, & Chalupka, (2015)* who found that there was a highly statistically significant relation between staff nurses' total performance scores and their demographic characteristics. Conversely, this result was in disagreement with *Grimshaw, et al., (2020)* who found that there was no statistically significant relation between staff nurses' total performance scores and their demographic characteristics

Regarding relation between demographic characteristics of staff nurses and their total audit scores, the current study revealed that there was a highly statistically significant relation between staff nurses' total audit scores and their demographic characteristics that includes: ages, gender, marital status, qualifications, past experience, and attendance of training courses.

This result was supported with *Hajibabae, et al., (2014)* who found that highly statistically significant relation between staff nurses' total audit scores and their ages, qualifications, past experience, and attendance of training courses. Also, this result was in agreement with *Waage, et al., (2014)* who found that highly statistically significant relation between staff nurses' total audit scores and their gender, and attendance of training courses.

Regarding correlation between staff nurses' total performance, audit scores, the current study revealed that there was a statistically significant correlation between nurses' total knowledge, performance, and audit scores.

This result was in agreement with *Inanloo, Mohammadi, & Haghani, (2017)* who found that there was a statistically significant correlation between nurses' total performance, and audit scores. Conversely, this result was in disagreement with *Ito, & Iijima, (2018)* who found that there was no statistically significant correlation between nurses' total knowledge, and audit scores.

Conclusion

The current study concluded that:

Presence of unsatisfactory nurses' knowledge, inadequate performance, as well as low audit scores regarding shift hand over and quality of report.

Recommendation:

In the light of results of this study, the following recommendations were suggested:

- Regular training of the nurses to improve their practice regarding shift report
- Conducting training program regarding shift report to overcome shift report problems.
- Provide continuous support to the nursing staff to enhance their writing skills.

References

Biondi, L., Dumay, J., & Monciardini, D. (2020). Using the International Integrated Reporting Framework to comply with EU Directive 2014/95/EU:

- can we afford another reporting façade?. *Meditari Accountancy Research*.
- Burd, B., John, S. N., Michelle, B. S., & Trilli, N. (2016).** Bedside Reporting at Change of Shift.
- Deng, J., Chen, S., Chen, J., Ding, H., Deng, D., & Xie, Z. (2018).** Self-reporting colorimetric analysis of drug release by molecular imprinted structural color contact lens. *ACS applied materials & interfaces*, 10(40), 34611-34617.
- Dumay, J., La Torre, M., Rea, M. A., & Abhayawansa, S. (2020).** A journey towards a safe harbour: The rhetorical process of the International Integrated Reporting Council. *The British Accounting Review*, 52(2), 100836.
- Ferguson, T.D., & Howell, T.L. (2015).** Bedside reporting: protocols for improving patient care. *Nursing Clinics*, 50(4), 735-747.
- Foster, C.L., Abraham, S.P., & Gillum, D.R. (2019).** Emergency Room Nurses' Views on Bedside Shift Reporting. *International Journal of Studies in Nursing*, 4(4), 55.
- Galtung, F. (2019).** How impactful is Fair Trade? A paradigm shift in reporting would tell a better story. *Journal of Fair Trade*, 1(2), 40-48.
- Ghosh, K., Curl, E., Goodwin, M., Morrell, P., & Guidroz, P. (2018).** An exploratory study on how to improve bedside change-of-shift process: Evidence from one hospital using technology to support verbal reporting. In *Proceedings of the 51st Hawaii International Conference on System Sciences*.
- Gökten, P. O., & Marşap, B. (2017).** Paradigm shift in corporate reporting. *Accounting and corporate reporting-today and tomorrow*.
- Grimshaw, J., Hatch, D., Willard, M., & Abraham, S. (2020).** A qualitative study of the change-of-shift report at the patients' bedside. *The health care manager*, 39(2), 66-76.
- Hajibabae, F., Joolae, S., Peyravi, H., Alijany-Renany, H., Bahrani, N., & Haghani, H. (2014).** Medication error reporting in Tehran: a survey. *Journal of nursing management*, 22(3), 304-310.
- Hill, L.G. (2020).** Back to the future: Considerations in use and reporting of the retrospective pretest. *International Journal of Behavioral Development*, 44(2), 184-191.
- Inanloo, A., Mohammadi, N., & Haghani, H. (2017).** The effect of shift reporting training using the SBAR tool on the performance of nurses working in intensive care units. *Journal of Client-Centered Nursing Care*, 3(1), 51-56.
- Ito, K., & Iijima, M. (2018).** The Paradigm Shift from Financial Reporting to Integrated Reporting. *Journal of Human Resource Management*, 6(3), 85-94.
- Khammarnia, M., Ravangard, R., Barfar, E., & Setoodehzadeh, F. (2015).** Medical errors and barriers to reporting in ten hospitals in southern Iran. *The Malaysian Journal of Medical Sciences: MJMS*, 22(4), 57.
- Lindskog, E. D. (2020).** U.S. Patent Application No. 16/698,028.
- McGinn, C. (2017).** Nurses Perceptions' of Bedside Reporting on an Intensive Care Unit Following Implementation.

- Melone, D. F. (2017).** Implementation of Intentional Rounding and Bedside Shift Reporting on Patients' Call Light Usage and Patient Satisfaction (Doctoral dissertation, Grand Canyon University).
- Mio, C., Fasan, M., & Costantini, A. (2020).** Materiality in integrated and sustainability reporting: A paradigm shift?. *Business Strategy and the Environment*, 29(1), 306-320.
- Mitchell, A., Gudeczauskas, K., Therrien, A., & Zauher, A. (2018).** Bedside reporting is a key to communication. *Archivos de Medicina*, 3(1), 13.
- Ofori-Atta, J., Binienda, M., & Chalupka, S. (2015).** Bedside shift report: Implications for patient safety and quality of care. *Nursing 2019*, 45(8), 1-4.
- Peplonska, B., Bukowska, A., & Sobala, W. (2015).** Association of rotating night shift work with BMI and abdominal obesity among nurses and midwives. *PloS one*, 10(7), e0133761.
- Potter, B., Adams, C.A., Singh, P.J., & York, J. (2016).** Exploring the implications of integrated reporting for social investment (disclosures). *The British Accounting Review*, 48(3), 283-296.
- Tan, A.K. (2015).** Emphasizing caring components in nurse-patient-nurse bedside reporting. *International journal of caring sciences*, 8(1), 188-193.
- Vrbnjak, D., Denieffe, S., O’Gorman, C., & Pajnikihar, M. (2016).** Barriers to reporting medication errors and near misses among nurses: A systematic review. *International journal of nursing studies*, 63, 162-178.
- Waage, S., Pallesen, S., Moen, B.E., Magerøy, N., Flo, E., Di Milia, L., & Bjorvatn, B. (2014).** Predictors of shift work disorder among nurses: a longitudinal study. *Sleep medicine*, 15(12), 1449-1455.