

Appraisal Interview: its Reflection on Nurse Interns' Shift report Exchange

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Abstract

Background: Effective communication has been identified as essential in providing safe and quality patient care and ensuring continuity in each patient's care. **Aim:** this study was aimed at investigating the appraisal interview and its reflection on nurse interns' shift report exchange. **Research Design:** A quasi – experimental study with one group pre/ post test design was utilized in this study. **Settings:** this study was conducted in all critical units affiliated to Ain Shams University Hospitals. **Subject:** all available nurse interns who started their internship in October 2017, and their total number was 89. **Tools** of data collection included two tools namely a shift report knowledge questionnaire and observation checklist for nurse interns' performance of oral shift report . **Results:** none of nurse interns 0.0% had satisfactory total knowledge of shift report at pre intervention phase. Conversely, all of them 100% had satisfactory total knowledge of shift report at the post and follow up phases of the intervention, none of them had adequate performance at pre intervention phase which increased to 100% of them performed adequate performance of shift report at post study phase, and follow up phase of the intervention was 85.3%. **In conclusion,** the implementation and conduction of an appraisal interview intervention for nurse interns about shift report was effective and reflected on improving their knowledge and performance in shift report exchange. **The study recommends** The appraisal interview approach should be used continuously as a constructive tool for development and improving the performance of nurse interns in different clinical care area, In-service training and continuing education programs must be initiated and be available to all nurses, nurse interns and newly graduates to be acquainted with knowledge and necessary skills related to oral shift report.

Key words: Appraisal Interview- Nurse Interns- Shift Report Exchange-Reflection.

Introduction:

Communication is a very common concept in everyday life and takes place in every setting, organization, area or a place, no work or operation or function is carried out without effective means of communication. Communication is a basic tool in nursing, a crucial element in health care. Communication, administrative skills are important components in preparing nurse interns (*Nebo, Nwankwo, Precious and Okonkwo, 2015*).

Nurse interns (NIs) are expected to be prepared adequately for the hard-working environment, increasing patient complexity, and higher level competencies. Thus, they should be educated and prepared to participate in shift exchange in order to provide safe patient care and to be better prepared for their role as professional nurses (*Abo Gad, 2019; AlThiga, Mohidin, Park and Tekian, 2017*).

Change of shift report is one of the most vital times during a nurse's work. Also, it is a crucial component of care in

the critical care environment (*Mukhopadhyay et al., 2015*).

In healthcare, a change-of-shift report is a meeting between healthcare providers at the change of shift in which vital information about and responsibility for the patient is provided from the off-going provider to the on-coming provider. Other names for change-of-shift report include handoff, shift report, handover, bedside shift report or sign-out. Change-of-shift report is the key to inpatient care because healthcare providers (nurses, physicians, nursing assistants etc.) are essential to providing around the clock care (*Groves, Manges, Scott-Cawiezell, 2016*).

Efficiency is demands during handoff that may compromise information exchange. Nursing interns (NIs) should be prepared for and learn the process of effective communication that promotes patient safety. The knowledge and skill to carry out a hand-off report may be briefly addressed in the classroom or simulation laboratory setting but is mastered from the observation of mentors and peers. *American association of critical care nurse (AACCN, 2016)*. Moreover, one's efficiency and effectiveness in communication can be improved through training, evaluation and interview.

Appraisal Interview is a discussion following a performance appraisal, in which supervisor and employee discuss the employee's rating and possible remedial actions. An interview to elicit information about the job or related matters to the employer some insight into what's right or wrong about the firm. The performance appraisal interview provides the employee with a chance to defend himself or herself against poor evaluation by the manager and also gives the manager a chance to explain what he or she thinks about the employee's performance (*Juneja, 2019; Bhaskar, 2018*).

Significance of the study:

Ensuring effective communication during shift report is particularly important in high stress, dynamic and ever changing health care environment of the critical unit, a nurse is responsible for ensuring that acutely and critically ill patient and their families receive optimal care, transition of that care across the continuum requires collaboration and communication within the team thus nurse interns must master shift report exchange. Actually, in critical care units, it was observed that nurse interns' performance regarding oral shift report displayed incomplete and incorrect information, also they were unable to provide an organized, complete, and concise sequenced and consistent hand-off report (*Mamaghani et al., 2018*).

Aim of the study:

The study was aimed at investigating the appraisal interview and its reflection on nurse interns shift report exchange.

Research Hypothesis

Nurse interns' performance related to shift report will improve after implementing appraisal interview.

Subjects and Methods

Research design

A quasi – experimental study with one group pre/ post test design was utilized in this study.

Setting

The study was conducted in all critical units, at Ain Shams University Hospitals. Includes "17" units divided as follows; Ain Shams University Hospital (7units), Pediatric Hospital (5units), Cardiovascular Hospital (4 units) and El demerdash hospital (1 unit).

Subjects

The study subjects include all available nurse interns recruited for the annual internship training program during first six months of their training. The time

period from 1/10/2017 to 31/3/2018 their total number was 89 nurse interns.

Data collection tools

Two tools were used for data collection.

1-Shift report Knowledge questionnaire: This tool was developed by the researchers based on related literature review (*Silvestri, 2017; Marquis and Huston, 2017; Khalaf, 2015; Basavanthappa, 2014 and Shazly, 2003*). It consisted of two parts:

Part (1): This part aimed at collecting personal characteristics of the nurse interns such as age, gender, unit and pre university education.

Part (2): This part includes knowledge questionnaire comprises a total number of 32 multiple choice questions (MCQs) covering shift report consists of (8) sections each section includes "4" MCQs.

❖ Scoring System:

for each knowledge question, a score "1" was given for a correct answer and "0" for incorrect one (*Khalaaf, 2015*). The total knowledge score was calculated by summing-up the score of 32 questions for a maximum score of 32. This sum total was converted into a percent total score of knowledge. The nurse interns' knowledge was considered satisfactory if the percent score was 60% or higher and unsatisfactory if less than 60%.

2-Observation checklist for nurse interns' performance of oral shift report :

This tool was modified by the researchers based on literature review (*Khalaf, 2015; Basavanthappa, 2014; Shazly, 2003*), the aim of this tool was to observe the actual performance of the nurse interns during shift report procedure, and included two parts:

Part (1): this includes identification data such as code number,

name of the unit, time of observation and observation number.

Part (2): Nurse interns observation checklist. This observation checklist categorized into (6) sections covering (67) items.

❖ Scoring System:

For each item or step observed to be done was scored "1" and "0" if not done. The total score for each section and for the total performance were calculated by summing-up the score attained. These were converted into percent scores. The nurse interns' performance was considered adequate if the percent score was 80% or higher and inadequate if less than 80%. This cutoff point was based on calculations of median and first quartile with a correction factor calculated from the discrimination index and internal reliability (*Khalaf, 2015; Barua, 2013*).

Operational Design:

The operation design for this study includes the preparatory phase, the pilot study, and the field work.

Preparatory phase:

This phase started from the beginning of July, 2017 to September, 2017 it covered 3 months. During this phase, the researchers reviewed the current, past, national and international related literature, journals, periodicals, articles, internet and books concerning the topic of the study, this was helpful in developing shift report knowledge questionnaire and modifying and classifying observation checklist for nurse interns' performance of shift report. Next the researchers started to design performance appraisal interview template and written guidelines form related to shift report to be attached with the appraisal interview.

Tools validity

Once the tools were prepared in preliminary forms, the shift report knowledge questionnaire was translated into Arabic and back translated into

English in order to check the consistency between the English and Arabic versions. Tools of data collection and the appraisal interview template related to shift report and written guidelines form were designed that contain the main elements related to shift report as purpose, principles, contents, and process, were presented to a panel of experts in nursing administration for examine face and content validity.

Pilot study:

A pilot study was carried out on 10 % (9) nurse interns of main study sample. The pilot served to test the clarity and applicability of the tools. It assessed feasibility of observation checklist as well as the clarity of the knowledge questionnaire and determined the time needed for filling in the questionnaire which was 30-35 minutes. The pilot study also served to assess the time needed for the observation was lasted 15-20 minutes for each nurse intern. The pilot sample was included in the main study sample.

Field work:

The actual field work of the study lasted for six months from the beginning of October 2017 to the end of March 2018. It involved assessment, planning, implementation, and evaluation.

The researchers visited each critical unit, explained the aim and nature of the study to nurse interns, this help interns accept to participate in the study. Then shift report knowledge questionnaire was distributed to nurse interns to assess their knowledge. The researchers were present during this process to give necessary instructions. Each nurse intern took approximately 30-35 minutes to answer the questionnaire and handed it back to researcher.

The study nurse interns were then observed individually three times during the morning, afternoon and night shifts before conducting appraisal interview to give feedback. The period between each two successive observations was at least

two days. The researchers observed the performance of nurse interns to assess their actual performance during change of shift report, using observation checklist of oral shift report. Oral shift report performance of the nurse interns as outgoing was observed while they report orally.

Administrative Design:

An official permission to carry out the study was obtained from pertinent authorities. The researchers met with hospitals directors and head nurses in all critical units and explained with them the aim of the study and the method of data collection to obtain their permission to conduct the study. Confidentiality of information was ensured, and data collection forms were anonymous.

Ethical consideration:

Prior the study the protocol was approved by ethics committee of the Faculty of Nursing at Ain Shams University. The researchers explained the aim of the study to all hospitals directors and head nurses as well as to all study participants. The participants were reassured that any obtained information would be confidential, and used only for the purpose of research, that subjects have right to choose to participate or not in the study, withdraw at any time. The study intervention had no actual or potential harm on participant. The study beneficence was clear in the improvement of performance of nurse interns which would reflect positively on their ability to apply it correctly.

Statistical Design:

Data entry and statistical analysis were done using (SPSS) version 20 statistical package for social sciences software. Data were presented using descriptive statistics in the form of frequencies and percentages for qualitative variables, and means and standard deviations and medians for quantitative variables. Qualitative variables were compared using

chi-square test. ANOVA or t-test analysis was used to explore the relation of personal characteristics with variables. Spearman rank correlation was used for assessment of inter-relationships among quantitative variables and ranked ones. Correlation Coefficient (r) test was used to test the closeness of association between two variables. In order to

Results

Table (1): shows that, majority of nurse interns were less than 25 years age (82.0 %), around two third of them were female (67.8%), and most of them (76.4%) were graduated from general secondary school.

Figure (1): As illustrated in Figure 1, the most of nurse interns (20.2%) had their training in pediatric and medical intensive care unit.

Table (2):As table 2 indicates, nurse interns' knowledge regarding shift report was generally unsatisfactory in pre intervention phase. this was evident in all sections (0.0%).At the post intervention phase, statistical significant improvement were shown in all sections, reaching to 100.0% for the sections of purpose and principles of shift report. The follow up phase revealed further improvement in some sections, while the other sections showed some declines, however, the

identify the in dependant predictors of the scores of knowledge and performance, multiple linear regression analysis was done, and analysis of variance for full regression models done. The expected value at P value < 0.05 was considered statistically significant. Bar charts were used to express some important percentages.

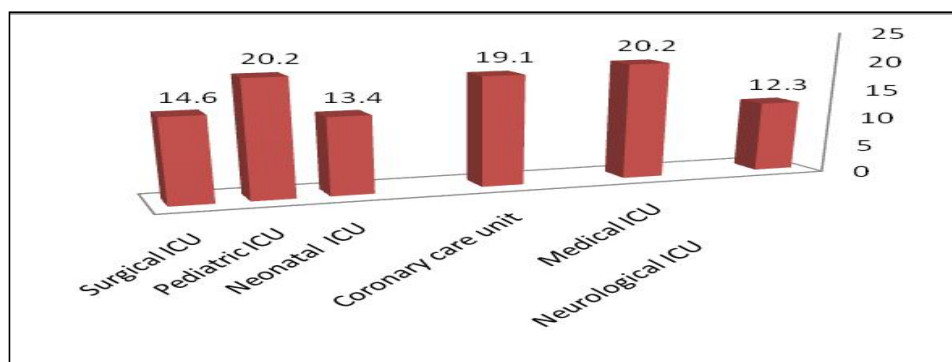
improvement remained significantly better compared with the baseline.

Table (3): As regard nurse interns' performance of oral shift report the table 3 indicates low performance in all sections at pre intervention phase. Thus none of them had adequate performance except for performance regarding general information of the department was (48.3%). At post intervention phase demonstrated marked improvement in nurse interns' performance in all sections of oral shift report reaching (100%).At follow up phase, the improvement continued in some areas, and declines in other sections, but the levels of performance still significantly higher compared with pre intervention phase.

Table (4): indicates that, there was only statistical significant positive weak correlation between knowledge at post intervention phase and performance at follow up phase ($r = .275^{**}$).

Table (1): Personal characteristics of nurse interns in the study sample (n= 89).

Age:	Frequency	Percent
< 25	73	82.0%
≥ 25	16	18.0%
Mean±SD	23.40±1.33 years	
Median	23	
Range	22.0- 30.0	
Gender		
Male	29	32.2%
Female	60	67.8%
Pre-university education	68	76.4%
General secondary school	21	23.6%
Technical institute		

Figure (1): Distribution of nurse interns in the study sample by work units.**Table (2):** Nurse interns' satisfactory knowledge of shift report throughout intervention phases: (n=89).

Satisfactory knowledge: 60+	Pre (n=89)		Phase Post (n=89)		FU (n=89)		X ²	X ²
	Count	Percentage	Count	Percentage	Count	Percentage	*P value Pre-post	*P value Pre-FU
Definitions	0	0.0%	88	98.9%	85	95.5%	86.011	83.012
Purpose	0	0.0%	89	100.0%	67	75.3%	87.011	65.015
Principles	0	0.0%	89	100.0%	85	95.5%	87.011	83.012
Oral shift report	0	0.0%	83	93.3%	82	92.1%	81.012	80.012
Contents	0	0.0%	48	53.9%	75	84.3%	46.021	73.013
Process	0	0.0%	84	94.4%	79	88.8%	82.012	77.013
Time	0	0.0%	80	89.9%	88	98.9%	78.013	86.011
Exchange	0	0.0%	80	89.9%	85	95.5%	78.013	83.012
Total	0	0.0%	88	98.9%	86	96.6%	86.011	84.012
							<0.0001*	<0.0001*

(**) Statistical significant at p<0.0001

Table (3): Nurse interns adequacy performance of oral shift report throughout intervention phases: (n=89).

Adequate performance of oral shift report(80%+)	Pre (n=89)		Phase Post (n=89)		FU (n=89)		X ² Pre-post *P value	X ² Pre-FU *p value
	No	%	No	%	No	%		
Gathering data for oral SR	0	0.0%	89	100.0%	69	77.5%	87.011 <0.0001*	67.014 <0.0001*
Condition of oral SR	0	0.0%	89	100.0%	79	88.8%	87.011 <0.0001*	87.011 <0.0001*
Criteria of oral SR	0	0.0%	89	100.0%	69	77.5%	87.011 <0.0001*	77.013 <0.0001*
Handoff process	0	0.0%	89	100.0%	89	100.0%	87.011 <0.0001*	86.011 <0.0001*
Criteria of place for oral SR	1	1.1%	89	100.0%	89	100.0%	86.011 <0.0001*	86.011 <0.0001*
General information of the department	43	48.3%	89	100.0%	86	96.6%	44.02 <0.0001*	44.022 <0.0001*
Patient's background information	0	0.0%	89	100.0%	87	97.8%	87.011 <0.0001*	84.012 <0.0001*
Patient's health status	4	4.5%	89	100.0%	89	100.0%	83.012 <0.0001*	81.012 <0.0001*
Nursing diagnosis	0	0.0%	89	100.0%	83	93.3%	87.011 <0.0001*	87.011 <0.0001*
Significant changes	0	0.0%	89	100.0%	87	97.8%	87.011 <0.0001*	81.012 <0.0001*
New physician orders	0	0.0%	89	100.0%	88	98.9%	87.011 <0.0001*	85.011 <0.0001*
Diagnostic lab test /result	4	4.5%	89	100.0%	87	97.8%	83.012 <0.0001*	82.012 <0.0001*
Fluid requirement	0	0.0%	89	100.0%	79	88.8%	87.011 <0.0001*	85.011 <0.0001*
Patient allergies	0	0.0%	89	100.0%	79	88.8%	87.011 <0.0001*	85.011 <0.0001*
Patient's teaching needs	0	0.0%	89	100.0%	85	95.5%	87.011 <0.0001*	77.013 <0.0001*
Patient's safety	1	1.1%	89	100.0%	69	77.5%	86.011 <0.0001*	82.012 <0.0001*
Total	0	0.0%	89	100.0%	76	85.3%	87.011 <0.0001*	82.011 <0.0001*

(**) Statistical significant at p<0.0001

Table (4): Correlation between nurse interns' knowledge and performance throughout intervention phases.

		Performance		
		Pre	Post	FU
Knowledge_pre	R	.028	.077	.005
	P value	.795	.471	.962
Knowledge_post	R	.026	.145	.275**
	P value	.808	.174	.009
Knowledge_FU	R	.065	.100	.039
	P value	.545	.351	.717
Overall_pre	R	1	0.015	0.116
	P value		0.891	0.278
Overall_post	R	0.015	1	0.062
	P value	0.891		0.564
Overall_FU	R	0.116	0.062	1
	P value	0.278	0.564	

Discussion

According to the nurse interns' knowledge regarding shift report. Finding of the current study revealed that, all nurse interns had unsatisfactory knowledge before the intervention. This was noticed in almost all sections tested. This result agreed with **Khalaf (2015)** and **Saad (2014)** in a study in Egypt who reported that, the study subjects had deficient knowledge before the intervention. This unsatisfactory knowledge could be due to that the internship training is the first contact and experience of nurse interns within real work life. A similar finding was reported by **Ewing, 2015 (2013)** in a study in California, and they recommended further training of different categories of nurses.

The result of the present study reported that there was statistical significant improvement in studied nurse interns' knowledge about shift report related to the all sections such as "definition, purpose, principles, oral, content, process, time and exchange. In this respect, **Cipra (2016)** stressed on the important of training to enables

nurses for effective change of shift report as a mean of communicating. This is especially true of nursing change-of-shift report. The findings of the study supported by **Blondon et al, (2017)** in Switzerland they detected that there was statistically significance improvement after implementation of standardized approach to content and process of shift report, he focused on use of support tool during bedside handoff. Also, in agreement with this, **Abraham et al. (2016)** in United States suggested that the handoff exchange may be improved by decreasing distractions and noise, providing dedicated handoff time, minimizing concomitant meetings, and providing a structured but flexible written tool.

Concerning nurse interns' performance of oral shift report, the results of the present study revealed similarly low level in almost all sections as for their related knowledge before the intervention. Many of the sections were not performed by any of them such as gathering data for oral SR, condition, criteria of oral SR, patient background information, handoff process, nursing diagnosis, significant changes, new orders, fluid requirements, patient allergies and teaching. This could reflect a lack of patient safety concept and culture among these nurse interns. The

inadequate performance in these sections may endanger the health status of the patients, and have a negative impact on their outcomes. This might be explained by that the nurse interns were not using standardized shift report format during change of shift report. In agreement with this finding, **Khalaf (2015)** emphasized that bedside shift report improves patient safety by incorporated safety checks into report, such as noting allergy alerts or patient risk for falling or skin ulcer.

Overall, none of the nurse interns in the present study had adequate total performance of oral shift report before the intervention. This may be due to lack of enough training about proper shift report, and deficient experience with the new methods of bedside shift report, which is shown by their deficient related knowledge. This is confirmed by the finding of a positive correlation between nurse interns overall scores of knowledge and performance of oral shift report.

Meanwhile, nurse interns' performance of shift report demonstrated significant improvements after implementation of the intervention. This was noticed in almost all sections, and continued through the follow-up phase, thus indicating the persistence of the effect of the intervention. This improvement is certainly due to the direct effect of the intervention and appraisal interview. In agreement with this present study finding, **Herceg (2015)** in San Francisco showed that staff interviews and feedback intervention provided qualitative data relevant to the process improvement and any need for alteration.

conclusion

In the light of the study findings, it is concluded that all nurse interns in the study setting had unsatisfactory knowledge and inadequate performance of oral shift report before the intervention. The implementation of an appraisal interview related to nurse interns' performance of oral shift report is effective and reflected on

improving their knowledge and performance in oral shift report exchange. Therefore, the advantage of this approach is confirmed, and it could be applied in the setting and in similar ones.

Recommendation

On Educational Level:

-The appraisal interview approach should be used continuously as a constructive tool for development and improving the performance of nurse interns in different clinical care area.

On Research Level:

- Further research is needed to assess the effectiveness of appraisal interview technique of nurse interns on other aspects performance of performance such as aseptic technique precaution and patients' outcomes.

On Hospital Management Level

- Nurse interns also need on the job training and orientation in application of standardized shift report protocol in each hospital to enhance nurse interns' compliance with accurate reporting and recording that will reflected on patient safety.

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