

ORIGINAL RESEARCH

# Applying a balanced score card approach and Multi-Rater feedback strategy to shift from appraising to managing head nurses' performance at general surgical units–Main Mansoura University Hospital–Egypt

Nervana Abdel-Rahman Gheith \*

*Department of Nursing Administration, Faculty of Nursing, Mansoura University, Mansoura, Egypt*

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## ABSTRACT

**Background and objective:** Traditionally, performance appraisal is used to measure behaviors, procedures or actions taken as in head nurse performance plans. Applying balanced score card measures at the nursing administration department level with participating the findings with all nursing staff and patients will help administrators to get all information needed to match head nurses performance plans with nursing administration department as well as hospital goals which help in drawing full shape of performance. The objective was to apply a balanced scorecard approach with 360-degree feedback strategy to shift from appraising to managing head nurses' performance at general surgical units -Main Mansoura University Hospital-Egypt.

**Methods:** Subjects: All supervisors (n = 12), head nurses (n = 10), staff nurses (n = 96) working in general surgical units and all available patients admitted to these units at the time of study (n = 113) were included. Tools: Eight tools that were used for data collection involved feedback questionnaires for patients, head nurses, staff nurses and supervisors, observational checklist, activity analysis checklist, auditing performance appraisal form, and auditing personnel decisions form.

**Results:** There was a statistically significant difference between head nurses, staff nurses and supervisors' perspectives from one side and among patients' perspectives from the other side regarding the performance of head nurses' in general surgical units. In addition, about a third of head nurses' time is spent in unrated activities. However, none of personnel decisions are depended on performance appraisal outcomes.

**Conclusions:** The results of the present study indicated that the methods used to measure head nurses' performance in general surgical units at Main Mansoura University Hospital were not integrated or depended on clear work standards to develop and improve the performance of Head Nurses (HNs).

**Key Words:** Balanced scorecard (BSC), Performance management, Multi-rater feedback, Performance appraisal, Performance measures, Head nurses (HNs), Staff nurses (SNs),

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\*Correspondence: Nervana Abdel-Rahman Gheith; Email: [nirvanagheith@yahoo.com](mailto:nirvanagheith@yahoo.com); Address: Department of Nursing Administration, Faculty of Nursing, Mansoura University, Mansoura, Egypt.

## 1. INTRODUCTION

Nursing management undergoing a revolutionary transition with the new emerging capabilities, developed means and improved ways that utilize their innovative and creative ideas to accomplish stability, excellence, satisfaction and progress. Hospitals usually re-explore patients' needs, willingness and awareness to newer and improved practices that have been developed to meet their demands. It helps hospitals by giving an improved look to their services. Every act of nursing administration tries to enhance to the highest level of nursing performance, whether it is either by value adding, cost reduction or by other dimensions to achieve excellence.<sup>[1]</sup>

For improving nursing staff performance, developing nursing administration in innovative manner, and increasing the quality of nursing care, nursing administrators are challenging to do efforts to get efficient and effective results. These efforts need to leave traditional tools for measuring performance and exchanging it by new, supporting and improving tools as well as techniques and procedures.<sup>[1]</sup>

Performance measurement is a way to assess the overall efficiency and effectiveness and the outcomes of the allocation of nursing staff. It involves assessing both financial and non-financial results. In performance evaluation, the actual performance is compared with the standards and performance indicators to measure the level of reaching the targets and comparing the outcomes with the previous results.<sup>[2]</sup>

Usually, a head nurse (HN) evaluation system is widely used for administrating wages and salaries, giving performance feedback, and identifying individual strengths and weaknesses. A HN evaluation has two general roles in organizations: 1) making administrative decisions about HNs (compensation, promotion, dismissal, downsizing, layoffs, etc.) and 2) identifying and plan HNs' growth opportunities (identify strengths or areas for growth, coach, develop career, etc.).<sup>[3]</sup>

Synonymously, many authors are used the terms of performance appraisal/evaluation and performance management as equal while there is a wide difference between them. Performance management can be defined as a continuous process, a comprehensive and flexible trend to organizations management and all who working in these organizations as teams and/or individuals, which involves the greatest possible dialogue between the concerned parties. In the other side, Performance evaluation or appraisal is a limited process, which includes managers evaluating the top-down performance of subordinates and regular rating it annually.<sup>[4]</sup>

Multi-source feedback, multi-rater feedback, multi-source assessment or 360-degree feedback are used synonymously in

human resources. 360-degree feedback strategy considered as one of the most substantial strategy in performance management system that come directly from all members around the employee in the workplace. Most often, it includes direct feedback from subordinates, peers, and the supervisor (s), as well as self-assessment. Almost all, 360-degree feedback in measuring the performance of HNs will involves direct feedback from staff nurses as subordinates, other HNs as peers, and supervisors as bosses, as well as a self-evaluation. In some circumstances, patients feedback also may be involved in stakeholders or customers. A 360-feedback strategy is different with "upward feedback", which refers to a formal way to give feedback through direct reports, or a "performance appraisal", which refers to review the performance of the HNs by their bosses only.<sup>[5]</sup>

Balanced scorecard (BSC) is a performance management tool that identifies quantifiable performance measures and targets and links them to a unified strategy. In order to do this, the BSC defines performance dimensions that are critical to strategy achievement. These dimensions are termed "perspectives" in the original literature. It involves four perspectives, which are: 1) the financial perspective; 2) the customer service perspective; 3) the internal business perspective; and 4) the growth and learning perspective.<sup>[6]</sup> The BSC approach enables nursing administration to translate its mission and vision into specific strategic objectives across the four perspectives. Once the appropriate objectives are identified, the scorecard guides the nursing administration to develop reasonable performance measures and establishes targets, initiatives and alternatives to meet programmatic goals.<sup>[7]</sup>

BSC is comprised of a range of indicators used to measure organizational performance. The indicators are "balanced" to ensure evaluation and based on both financial and non-financial performance. Developing a BSC performance measure involves four steps: identify service objectives, consider measures for the objectives, consider whether the set of measures will ensure a sufficient assessment of progress towards the achievement of these objectives (key performance indicators) and develop reporting formats.<sup>[8]</sup>

When translating the scorecard to nursing, a significant modification of the "traditional" perspectives is required. The major difference in a nursing BSC, as opposed to an industry BSC, is that the major focus of the nursing's vision and mission is on patient safety and clinical quality rather than on financial performance.<sup>[9]</sup>

The framework of BSC has found widespread use in the public and not-for-profit sector. However, it is important to make a few changes to the strategy map template in order

to make it suitable to government, public sector and not-for-profit organizations. In this case, financial perspective refers to how to manage resources efficiently and effectively as possible to enable the delivery of outcomes and objectives through running the financial perspective alongside the other perspectives.<sup>[10]</sup>

The BSC philosophy is not apply only at the nursing administration department level. A balanced approach to HN performance appraisal is an effective way of getting a complete look at a HN's work performance, not just a partial view. Too often, HNs' performance plans with their elements and standards measure behaviors, actions, or processes without also measuring the results of HNs' work. By measuring only behaviors or actions in HNs' performance plans, a nursing administration department might find that most of its HNs are appraised as prominent when the nursing administration department as a whole has failed to meet its objectives. By using balanced measures at the nursing administration department level, and by sharing the results with supervisors, teams and Staff Nurses (SNs), managers are providing the information needed to align HNs performance plans with organizational goals. By balancing the measures used in HNs performance plans, the performance picture becomes complete.<sup>[7,11]</sup>

### 1.1 Significance of the study

- (1) Improving holistically, the decision-making at all levels of nursing by supporting the hospital strategy and increasing the consideration of patients' satisfaction in addition to reinforce probity.
- (2) Raising the level of awareness of HNs regarding the effect of their daily activities on the hospital dashboard.
- (3) Drawing the attention of HNs towards improving the productivity of the hospital by using BSC as a guide to make the balance between all areas and define the tolerance limit set above or below the acceptable level of productivity.
- (4) Balanced scorecard provides a powerful framework for building and communicating strategy. It is visualized in a strategy map, which forces managers to think about cause-and-effect relationships.
- (5) Hospitals with a BSC have the ability to align their departments with the strategic goals. In order to implement a hospital plan well, hospitals challenge to link all services and support units with the same goals and direct all activities to achieve their goals by embedding BSC into those units.
- (6) Balanced scorecard will mobilize leadership for change by increasing their participation, communication, and HNs innovation and initiative.

- (7) Multi-rater feedback results can be used to plan and map specific paths in nursing administration development and compensation administration.
- (8) Many organizations give advising to use BSC to enhance their promotion and improvement. These organizations provided some articles relating to BSC and no one addresses nursing administration topics. In addition, no one of the provided articles made combination between BSC and multi-rater feedback strategy to manage HNs performance.<sup>[7,12,13]</sup>

### 1.2 Aim of the study

The present study aimed to apply balanced scorecard approach with 360-degree feedback strategy to shift from appraising to managing head nurses' performance at general surgical units–Main Mansoura University Hospital–Egypt.

### 1.3 Research questions

- (1) What is the satisfaction level of the patients admitted to general surgical units about HNs' performance?
- (2) What are the general surgical HNs' perspective to their own performance?
- (3) How SNs working in general surgical units see their HNs performance?
- (4) What are the perspective of general surgical supervisors regarding HNs performance?
- (5) How do HNs at general surgical units spend their time?
- (6) What is the level of completeness of the performance appraisal sheet for HNs at general surgical units, which cover all criteria needed to measure it effectively?
- (7) Are the decisions relating to HNs at general surgical units (such as, promotions, transfer, attending training programs or workshops) depending on their performance appraisal results?

## 2. SUBJECTS AND METHODS

### 2.1 Research design

Descriptive analytical cross sectional design was used to carry out this study.

### 2.2 Setting

The study was carried out in five general surgical inpatient units at Mansoura University Hospital. The bed capacity of all units is 180 beds. It includes, surgical 6 (42 beds), surgical 7 (36 beds), surgical 8 (45 beds), surgical 11 (30 beds), surgical 12 (27 beds).

### 2.3 Subjects

Four types of participants were included in the present study namely:

- All HNs in general surgical units (n = 10).

- All available SNs working in general surgical units with criteria of minimum spent one experience year in the unit at the time of study (n = 96).
- All supervisors in general surgical units included in the study (n = 12).
- All available patients admitted to general surgical units during the time of study with stability in their health state and approved to participate in the study (n = 113).

## 2.4 Jury group

Three jury groups were included in the study to confirm the developed tools regarding its face and contents validity. Jury groups include eight academic staff from nursing administration department and medical surgical departments at nursing faculty, three academic staff from business department at commercial faculty-Mansoura University and four nursing administrators from Mansoura University Hospitals.

## 2.5 Tools

Eight tools were employed in data collection namely: 1) patient feedback questionnaire sheet, 2) HNs feedback questionnaire sheet (as a peer perspective), 3) SNs feedback questionnaire sheet, 4) supervisors feedback questionnaire sheet, 5) observational checklist, 6) activity analysis checklist, 7) auditing performance appraisal form, and 8) auditing personnel decisions. According to BSC, four perspectives (customers' perspective, process perspective, financial perspective and learning and innovation perspective) were measured to manage HNs performance. The first four tools aimed to measure customers perspective (defined as the perspective of all those who dealing with HNs – patients, peers (HNs), SNs and supervisors – and affecting by their performance). The researcher designed these four tools based on 360-degree feedback strategy defined by Bracken and Rose<sup>[5]</sup> and Naidu.<sup>[14]</sup> The fifth, sixth and seventh tools used for measuring the balance of cause and effect relationship between HNs performance outcomes and the consequences of these outputs.

### *First tool: Patient Feedback Questionnaire Sheet*

This tool aimed to answer the questions related to how do patients see the services outcomes provided by HNs in their units. This tool included 25 items measuring patients perspective regarding: technical-professional area (7 items), educational relationship area (7 items) and trusting relationship area (11 items). Cronbach's alpha was 0.83.

### *Second tool: HNs Feedback Questionnaire Sheet*

It is used to appraise the performance outcomes of HNs from the perspective of their co-workers. It was answered the question; how do HNs see the performance of their peers? It

involved 30 items divided into three management' measures which are: patient management (9 items), staff management (15 items) and unit management (6 items). Cronbach's alpha was 0.83.

### *Third tool: SNs Feedback Questionnaire Sheet*

It is used to evaluate the performance outcomes of HNs in different surgical units from the perspective of their subordinates and if their HNs satisfied their needs. It is adjusted the previous tool used in the HNs feedback questionnaire sheet to fit the feedback of staff nurses. Cronbach's alpha was 0.79.

### *Fourth tool: Supervisors Feedback Questionnaire Sheet*

This tool is used to appraise the performance outcomes of HNs in different surgical units from the perspective of their supervisors. Moreover, it included the same 30 items mentioned in HNs feedback questionnaire with reformulate the sentences to fit supervisors opinions. Cronbach's alpha was 0.81.

In the previous four tools, respondents select one answer from a five-point likert rating scale that ranged from (strongly agree = 5 points) to (strongly disagree = 1) which correspond to their perception.

### *Fifth tool: Observational Checklist*

It is used to explore if HNs working in surgical units perform all duties and responsibilities assigned to them and found in their job description. According to BSC, this tool used to measure process perspective (defined as all HNs roles, duties and responsibilities). So, job description developed by Moustafa et al.<sup>[15]</sup> used as a plan of action to measure it. This tool included 30 items divided as patient management (9 items), staff management (15 items) and unit management (6 items). Each item marked to be met, partially met or not met. The number of items marked met were counted and their percentage was calculated by dividing their total by the total number of items. Cronbach's alpha was 0.87.

### *Sixth tool: Activity Analysis Checklist*

It is used to estimate the amount of time devoted to various nursing care activities by HNs working in the surgical units, and how they used units' resources. It is adapted to record and analyze nursing activities using work-sampling technique adopted from the record developed by Regunath and Tamilselvi.<sup>[16]</sup>

In addition, as regard to BSC, monitoring time and motion of HNs used to measure financial perspective (defined in non-profit hospital as cost efficiency – it means the ability to deliver maximum value to patients from available resources).

This checklist shows the time of observation, type of observed nursing personnel, brief description of activity, the

area into which the activity fallen and the skill level required for its performance of the activity. These nursing activities are divided into four major areas: patient-centered activities (9 items), staff-centered activities (15 items), unit-centered activities (6 items), and unclassified activities (1 item) (it refers to the activities return to the person as an individual and not related to the work). Cronbach's alpha was 0.89.

#### ***Seventh tool: Auditing Performance Appraisal Form***

It was developed to critique HNs performance appraisal sheets to ensure; if the performance appraisal form was completing all items needed to evaluate HNs performance in a clear description (clear standards and criteria), if the appraisal sheet explored the deviations from the desired performance, if it included future improvement suggestions. It consists of 26 items, each item marked to be found or not found. The number of items marked found were counted and their percentage was calculated by dividing their total by the total number of items. Cronbach's alpha was 0.91.

This tool developed by the researcher based on performance appraisal sheet, which are using in King Abdul-Aziz University Hospital (King Abdul-Aziz University Hospital - Jeddah, Saudi Arabia, got on Diamond Canadian accreditation on meeting international standards of excellence in quality care and service 2012-2015).<sup>[17]</sup>

#### ***Eighth tool: Auditing Personnel Decisions***

It is used to follow up if the suggestions after performance appraisal process are considered in personnel decisions or not. It is answered one question; Are appraisal results used appropriately as a factor that is considered when making other personnel decisions (such as within-grade increase determinations, promotion decisions, attendance of workshops, conferences, training program, etc.).

The researcher audit all human resource strategy (provided in the year next to performance appraisal) to the 10 HNs in surgical units in the current year after their performance appraisal. It lists all training programs, workshops, disciplines or punishments, conferences, promotions, transfers, salary increase and bonus. The list includes three columns: the first column included the unit name, the second mentioned the procedure taken and in the end the cause for procedure. The researcher examines all procedures for HNs and marked it as recommended or not recommended in their performance appraisal sheets.

Based on BSC, the seventh and eighth tools are used to measure learning and growth perspective (defined as the learning and growth decisions made as results of HNs performance appraisal and lead to improvement in their future performance).

## **2.6 Methods of data collection**

- (1) Approval was obtained from the director of main Mansoura University Hospital, the director of nursing services administration and the director of employees' affairs department. The aim of the study was explained to all participants in the study and verbal consent to participate was obtained.
- (2) Jury group members tested data collection forms for its face and content validity and consistency reliability.
- (3) The patient, HNs, SNs, and supervisors questionnaire sheets were handled to everyone, it took about 30 minutes for fill each of them.
- (4) Data collection information for the observational and activity analysis checklists were done from observation of HNs performance for continuous six days and interviews conducted with patients, HNs, SNs and with supervisors.
- (5) Retrospective auditing of the 10 HNs' files were done through two stages: the first was auditing performance appraisal form to ensure it contained complete duties and responsibilities which HNs' need to perform their work. The second was auditing of all decisions provided to HNs and compared the two stages to ensure if these decisions based on the results of HNs performance appraisal or not.
- (6) Total time taken for data collection was five months starting June 2013.

## **2.7 Statistical analysis**

Data analyzed and summarized using percentages for categorical variables and mean and standard deviation for numerical variables. Comparison of HNs, SNs and supervisors perspective means regarding HNs performance were done using F-test. For comparative purpose, score are presented as absolute values and as percentages from the maximum score of each topic. This maximum score depends on the number of items of each topic. Analysis of data obtained by means of observation of HNs activities consisted of tallying and adding up the number of times an activity was performed according to areas. The number of hours and percentages spent on different areas of activities were computed. The threshold of statistical significance was  $p$ -value  $< .05$ .

## **3. RESULTS**

Table 1 explores demographic characteristics of SNs, HNs and supervisors under study. Regarding the age, the highest percent of SNs (29.17%) were at age group ranged from 25 to less than 35 years old and the lowest percent of them (11.46%) at age group over than 55 years old. While, the highest percent of HNs and supervisors (50% and 66.66%

respectively) were at age group ranged from 35 to less than 45 years old and the lowest percent of HNs were at age group ranged from 45 to less than 55 years old and ranged from 25 to less than 35 years for supervisors (20% and 8.33% respectively). Most of SNs in the present study (59.38%) held diploma degree, in addition, the highest percent of HNs held bachelor degree, and, the most supervisors held diploma degree with specialty. While, the lowest percent of SNs and supervisors (7.29% and 16.67% respectively) held bachelor degree and HNs (40%) held diploma with specialty. As regard, the most of SNs and HNs had experience years ranged from 10 to less than 15 years while the highest percent of supervisors had experience years ranged from 15 to less than 20 years. In addition, the lowest percent of SNs, HNs and supervisors (14.58%, 10% and 16.67% respectively) had over

than 20 years of experience. Also, the most of study groups were married.

Table 2 shows mean, standard deviation and *t*-value differences of patients perspective regarding head nurses' (HNs) performance outcomes in their care units. In general, there was a statistically significant difference of patients perspective regarding HNs performance in general surgical units ( $p \leq .05$ ). The overall patients' agreement upon HNs performance in all areas was 57.32% of maximum score. It was observed that the perspective of patients were nearly equal regarding HNs performance in technical-professional area and trusting relationship which were 61.11% and 68.89% respectively from maximum score, while the lowest percent of their perspective regarding HNs performance was 41.96% from maximum score for trusting relationship area.

**Table 1.** Demographic characteristics of SNs, HNs and supervisors under study

Demographic characteristics	SNs (n = 96)		HNs (n = 10)		Supervisors (n = 12)	
	No	%	No	%	No	%
<b>Age</b>						
< 25	17	17.71	--	--	--	--
25-	28	29.17	3	30.00	1	08.33
35-	21	21.87	5	50.00	8	66.66
45-	19	19.79	2	20.00	3	25.00
> 55	11	11.46	--	--	--	--
<b>Educational qualifications</b>						
Diploma	57	59.38	--	--	--	--
Diploma with specialty	32	33.33	4	40.00	10	83.33
Bachelor	7	07.29	6	60.00	2	16.67
Master	--	--	--	--	--	--
Doctorate	--	--	--	--	--	--
<b>Experience years</b>						
< 5 years	18	18.75	--	--	--	--
5-	22	22.92	2	20.00	1	08.33
10-	27	28.12	4	40.00	3	25.00
15-	15	15.63	3	30.00	6	50.00
> 20	14	14.58	1	10.00	2	16.67
<b>Marital status</b>						
Single	28	29.17	1	10.00	2	16.67
Married	68	70.83	9	90.00	10	83.33

**Table 2.** Mean percent, SD of Patients perspective regarding HNs performance outcomes in their care units (n = 113)

Measuring areas	Patient perspective by mean percent		<i>p</i>
	M** ± SD		
Technical-professional area	61.11 ± 3.78		.000*
Educational relationship area	41.96 ± 6.57		.001*
Trusting relationship area	68.89 ± 5.99		.000*
Total mean percentage of patients agreement upon HNs performance from maximum score	57.32 ± 5.21		.000*

M\*\* = mean percentage from maximum score. \* Significant difference at  $p < .01$ .

Table 3 demonstrates perspectives of HNs themselves, SNs and supervisors regarding the performance of HNs in surgical units. As regard, there was a statistically significant

difference between HNs, SNs and supervisors agreement for HNs performance in the surgical units  $p < .05$ . In addition, there was a statistically significant difference between partic-

ipants agreement regarding the performance of HNs in staff management activities  $p > .05$ . Accordingly, HNs agreed upon their performance in staff management activities with the highest mean percentage 96.87% from maximum score. While, SNs and supervisors agreed on the performance of the HNs in the unit management with the highest mean percentage from maximum score (82.49% and 79.38% respectively). In addition, HNs agreed on their performance of patient care management activities with lowest mean percent 89.35% while SNs and supervisors agreement on HNs performance in staff management activities with the lowest mean percent (68.73% and 72.69% respectively).

Table 4 explores number and percent of fulfilling HNs all their duties and responsibilities in the assessment general

surgical units by the researcher. This table illustrates that the highest percent of patient, staff and unit centered activities (46.67%, 44.44% and 66.67% respectively) were partially met while the lowest percent of all areas of HNs activities included patient, staff and unit (20.00%, 22.22% and 16.66% respectively) were fully met. In addition, HNs in general surgical units were not met patient and staff activities by percent 33.33% equally.

Table 5 demonstrates observed time spent for all levels and areas of activities of the HNs in the general surgical units (n = 10). Accordingly, Table 5 shows that the highest percentage of HNs time 35.50% spent in unclassified activities, followed by 27.28% spent in patient centered activities and 14.63% spent in staff centered activities.

**Table 3.** Perspectives of HNs themselves, SNs and supervisors regarding the performance of HNs in general surgical units

Measuring areas	HNs perspective (n = 10)	SNs perspective (n = 96)	Supervisors perspective (n = 12)	F <i>p</i>
	M** ± SD	M** ± SD	M** ± SD	
Patient care management	89.35 ± 3.56	75.22 ± 8.94	78.45 ± 4.37	1.485 .091
Staff management	96.87 ± 2.84	68.73 ± 5.28	72.69 ± 4.49	0.737 .028*
Unit management	93.67 ± 3.58	82.49 ± 7.33	79.38 ± 2.21	0.859 .087
Total mean percentage from maximum score	93.29 ± 3.74	75.48 ± 7.69	76.84 ± 3.63	1.855 .042*

M\*\* = mean percentage from maximum score. \*  $p \leq .05$ .

**Table 4.** Number and percent of fulfilling HNs all their duties and responsibilities in the assessment general surgical units by the researcher (n = 30)

Duties and Responsibility, [Source of information*]	Not met		Partially met		Fully met	
	No	%	No	%	No	%
A) Patient centered activities. [1,2,3,4,5,6]	5	33.33	7	46.67	3	20.00
B) Staff centered activities. [2,3,4,6]	3	33.33	3	44.44	2	22.22
C) Unit centered activities. [1,2,3,4,5,6]	1	16.66	4	66.67	1	16.66

\*Source of information code: [1] Interview patients [2] Interview SN [3] Observe HNs [4] Observe inference [5] Interview with caregiver, and [6] Retrospective audit of HNs files.

**Table 5.** Observed time spent by minutes for all levels and areas of activities of the HNs in the general surgical units (n = 10)

Duties and Responsibilities	Time consumed/HN	
	No	%*
A) Patient centered activities.	98.23	27.28
B) Staff centered activities.	52.67	14.63
C) Unit centered activities.	81.29	22.58
Idle time consumed in unclassified activities	127.81	35.50
Total time consumed in all activities	360	100

\*Mean percentage of total time spent/head nurse/day.

Table 6 shows researcher critique of completeness performance appraisal sheets for the general surgical HNs from their files in the last evaluation (n=10) and jury group agree-

ment for face and content validity of the critique sheet. the table illustrated that the face validity of all critique sheet was 91.73%, and face validity of its items ranged from 100% to

86.66%. However, it is observed some items are not exist at all in HNs performance appraisal sheet such as the results of last performance appraisal, the procedures taken as a results of last performance appraisal, last clinical experience, last rewards or discipline, job summary, positive and nega-

tive deviations in the performance in addition suggestions for future performance improvement. Also, the table shows incompleteness in some items which ranged between 20% for absenteeism rate with or without cause to 62.2% for the relative weight proportional related to each item.

**Table 6.** Researcher critique of completeness performance appraisal sheets for the general surgical HNs from their files in the last evaluation (n = 10) and jury group agreement for face and content validity of the critique sheet

Performance Appraisal Sheet Contents	Completeness of performance appraisal sheets		Jury group (15)	
	No.	%	No	%
-It looked like performance appraisal sheet	10	100	15	100
-It had complete elements	4	40	15	100
-It represented a performance appraisal of HNs in surgical units	4	40	13	86.66
-It involved HN name	10	100	15	100
-It included HN code number	10	100	15	100
-The date and time of evaluation were found	6	60	15	100
Absenteeism rate are found:				
-With cause (sick leave, emergency leave, vacation)	2	20	14	93.33
-Without cause (casual leave)	2	20	14	93.33
The results of the last performance appraisal	0	00	13	86.66
The procedures taken as a result of last appraisal	0	00	15	100
-Professional qualifications are found	10	100	15	100
-Last clinical experience are presented	0	00	13	86.66
-The last rewards or discipline are found	0	00	14	93.33
-Personal characteristics are presented	7	70	15	100
- It had Job summary of the role of the HNs in surgical units	0	00	14	93.33
- Job relationships is found	10	100	15	100
Complete duties and responsibilities of HNs in surgical units are presented regarding:				
-Patient management (9 items)	3.06	30.6	11.07	73.80
- Staff management (15 items)	4.84	48.4	10.66	71.06
- Unit management(6 items)	2.91	29.1	13.89	92.60
Positive deviations are presented	0	00	15	100
Negative deviations are found	0	00	15	100
Suggestions for future performance improvement are found	0	00	15	100
Each item had relative weight proportional with its important	6.22	62.2	15	100
Total score is found	10	10	15	100
Signature of HN as a consent on appraisal is found	10	10	15	100
Signature of supervisor is found	10	10	15	100

Note. Content validity index = 91.73

Figure 1 shows relationship between all personnel decisions (provided in the next year of performance appraisal) regarding HNs at general surgical units and their performance appraisal results. It was observed that no personnel decisions provided to HNs in general surgical units were recommended in their performance appraisal sheet by their supervisors. As regard, the regular annual increases in the salaries and other benefits provided to all HNs in general surgical units with 100%. In addition, it is observed that no one of them attended conferences, obtained promotions or transfer from their units to another one. As regard, 20% of HNs attended the two workshops conducted in the hospital and 20% got discipline because of their delaying in official working hours.

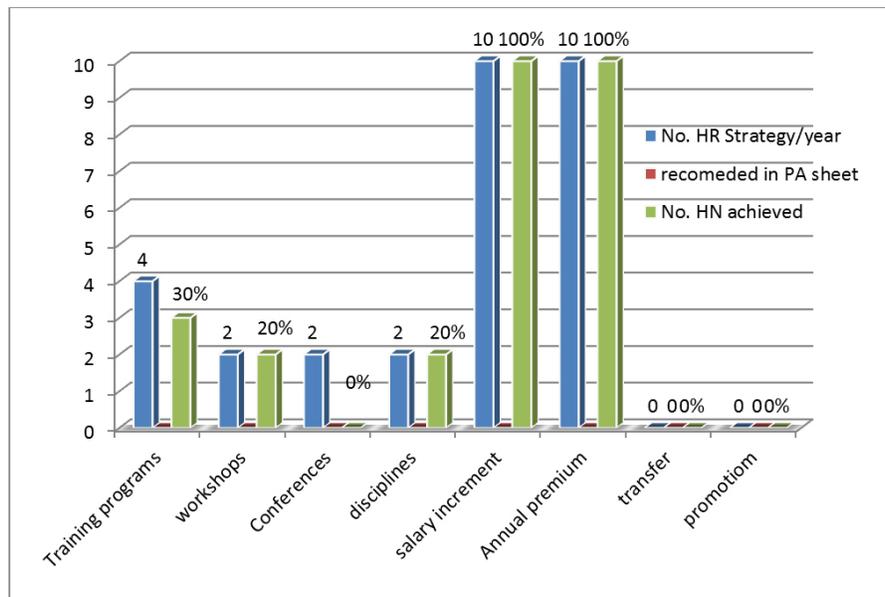
Moreover, 30% of them attended the four training programs conducted in the hospital.

#### 4. DISCUSSION

The 360-feedback process as a performance appraisal tool should only be considered if there is a very strong existing performance appraisal system in place, as well as an open and mature organizational culture where constructive feedback is readily given and accepted in a spirit of continuous improvement and non-blaming.<sup>[18]</sup> Also, the idea of the BSC is simple but extremely powerful if implemented well.<sup>[19]</sup> The challenge therefore is to identify whether there is an acceptable approach which maintains the integrity of 360-feedback

yet facilitates a more balanced and objective performance management rating. Therefore, the present study aimed to combine multi-rater feedback strategy with BSC to man-

age general surgical HN's performance at Main Mansoura University Hospital.



**Figure 1.** Relationship between personnel decisions regarding HNs at general surgical units and their performance appraisal results

Patient feedback or patient centeredness has been prompted to improve nursing care quality as well as quality of health-care. Overall, the results of the present study explored there was a significant differences between patients perspectives regarding HN's performance in general surgical units. It was being indicated that most patients reported moderate or low mean score for perceiving the performance of HN's in all measuring areas. Patients in general surgical units have lower expectations of care, often show appreciations for the role of the HN's, and seek excuses for any shorten and believe that daily contact during round with doctor is sufficient and there is no need to disable the performance of their work as long as they get their treatment on time. In addition, the patients know very little about their rights, especially in health education and believe that enough to answer their questions, they were reported less of courtesy and helpfulness of the staff, less amount of dignity and respect shown by staff and unclear and incomplete explanation provided by the staff about their medications and its side effects. Therefore, the items of questionnaire for measuring patients' feedback was surprising for many patients. This finding was consistent with the previous study by Ontani et al.<sup>[20]</sup> who found that staff care and nursing care have a greater influence on a patient's decision to give an "excellent" rating than physician care and admission process. They added that because it is not practical to reduce the number of patients who do not mark

"excellent" to zero, it is reasonable for unit managers to strive for patients to mark "excellent" first on staff care and nursing care. Also, Berkowitz<sup>[21]</sup> mentioned that there is evidence that there are two states of patients' satisfaction, stable ones related to nursing care generally and dynamic ones related to specific nursing care interactions. In addition, Beach et al.<sup>[22]</sup> suggested seven dimensions of patient-centered care, which were identified as respect for patients' values, preferences, and expressed needs; coordination and integration of care; information, communication, and education; physical comfort; emotional support and alleviation of fear and anxiety; involvement of friends and family; and transition and continuity.

There are three main areas of HN's roles, which are patient care management to ensure that patient total needs are met, staff management to utilize, guide, evaluate, and correct SN's in their nursing practice, as well as unit management to ensure its smooth running to fulfill hospital goals.<sup>[23]</sup> Accordingly, the present study illustrated that there was a statistical significant difference between HN's, SN's and supervisors perspectives regarding the total measuring areas of the HN's activities at general surgical units as well as staff management activities. Also, the highest mean percentage score for all measuring areas of HN's activities provided by HN's themselves. This may be because people in self-assessment

are often biased to themselves and tend to overestimate their abilities. Although HNs perceived themselves performing almost all of staff management activities, supervisors and SNs believed them unable to function fully in it. This may contribute to supervisors and SNs observe that the most of HNs in general surgical units had no ideas about the mission and philosophy of the hospital to clarify it to their staff, they had no time to communicate well with staff, no planning for staff continuing education and no enough budget for that. Again, HNs had no updating for their knowledge and practice to improve the quality of care provided and most of them cannot dealing with information systems to facilitate communications process in all directions. All of these purposes lead to use inappropriate performance appraisal technique for measuring the performance of HNs in general surgical units as well as the assessment of the performance of all nursing personnel in the hospital. These findings are similar with those reported with Curtis et al.<sup>[24]</sup> who emphasized on nurses assuming responsibility for influencing and improving the practice environment. It includes empowering others, facilitating learning, developing nursing knowledge, working with and through others to achieve success.

As regard, the finding of the present study indicated that the highest mean percentage of HNs performance went to unit management activities as perceived by SNs and supervisors. This may be due to the most of HNs were responsible on completing records and reports, apply rules, policies and regulations, making request for the maintenance department to repair the needed machines and equipment and determine needed equipment and supplies in their units. Armstrong et al.<sup>[25]</sup> supported this result and found that more than one third of HNs time spent in ordering, reporting, recording and managing stock and equipment.

Analysis of the recorded observations revealed that duties and responsibilities performed by the HNs at surgical units at Mansoura University Hospital in terms of areas was mostly related to unclassified activities followed by patient management activities. That means nearly one third of HNs time consumed in idle time such as casual talking with staff and other care providers, taking their breaks to eat and drink during work time. Moustafa et al.<sup>[15]</sup> reached the same result and found that too much time spend on coffee breaks, socializing with staff, waiting for other health team to do work together, or waiting for the missed equipment or supplies to complete the procedures.

Patient management was the second area consumed HNs' time as observed in the result of the present study. Most of their time devoted to supervise administering medication, change dressing, provide direct care, and exchange infor-

mation related to patients. However, the HNs consumed their lowest time in staff management activities. Again, HNs at surgical units had no time to budget and update knowledge, to evaluate and improve the performance of their staff and solve their problems effectively. It is opposed with the findings of studies by CNA<sup>[26]</sup> and Moustafa et al.<sup>[15]</sup> who clarified that patient management is the third priority of the expected job of HNs in surgical units.

Updating performance appraisal forms are extremely important to measure the performance problems clearly and to identify strengths and weakness in performance to take various career decisions such as promotions, transfer, conducting training programs and workshops, providing bonuses and other benefits or punishments according to the performance appraisal results. Finding of the present study revealed that some items are not exist at all in HNs performance appraisal sheet such as last clinical experience, last rewards or discipline, the results of last performance appraisal, the procedures taken as a result of last performance appraisal, job summary, positive and negative deviations in the performance in addition suggestions for future performance improvement. The nursing administrators of the main Mansoura University Hospital don't give attention to review different forms included performance evaluation forms to stand on its weakness or try to improve it in line with global developments and the needs of changing marginal nursing care to proficiency. In addition, supervisors had not any training in coaching skills, and how to assist employees with implementing their development plans, and giving ongoing feedback on progress or constructively accept feedback that affect their ability to provide positive and constructive feedback to HNs under their supervision. This finding congruent with CIPD<sup>[27]</sup> who believes that the poorly designed performance appraisal form can frustrate and disengage managers and employees from the process and defeating the whole purpose of having employee appraisals. Torrington<sup>[28]</sup> emphasized the role of managers in the performance management and mentioned that the manager plays an important role in the level of competence not only in motivating, coaching and enabling performance, organizing resources and facilitating any developmental opportunities, but also in coaching and monitoring and if necessary revising performance expectations and objectives.

In addition, jury group agreement for face and content validity of the critique sheet. The finding illustrated that the face validity of all critique sheet was 91.73%, and face validity of its items ranged from 100% to 86.66%. This result explored the importance of completeness of performance appraisal sheet as a base for all decisions aimed at developing and improving the quality of nursing care provided and

develop plans that are consistent with societal changes and developments in the fields of nursing. In this respect, Lussier and Hendon<sup>[4]</sup> mentioned that accurate information from performance appraisal is necessary for management decision making and is a critical component to allow the manager to improve organizational productivity. In addition, they determined two parts for effective performance appraisal process that are evaluating and motivating; evaluating is about assessing past performance, and motivating is about developing employees to improve their future performance.

As a result of incompleteness of performance appraisal sheet as the present study finding indicated, all job decisions related to HNs are not recommended in their performance appraisal sheets. As well as, the present study indicated that 30% of HNs attended four training programs, 20% only attend two workshops, nobody attend the two conferences conducted in the hospital and 20% were punished by discount one day of monthly salary for one of them and the other one disciplined by adding two night shifts to her schedule. Again, the percentage of HNs gotten annual premium and salary increments were 100%. It means that their superiors were not given these benefits as a result of HNs performance outcomes, so, the concepts of equity and justice have another explanation from the perspective of appraiser when they are not linked it with HNs performance and productivity. In the same line, Lussier and Hendon<sup>[4]</sup> concluded that the appraisal debrief must be a well-rounded look at individual employees; it should identify both positive and negative factors in the employees' behaviors and results within their job. Lussier and Hendon believed that if employees are given an honest opportunity to fix something that they know is a problem and are given the necessary tools or training, most will take advantage of that opportunity. Also, Grigoroudis and Zopounidis<sup>[2]</sup> emphasized that HNs performance evaluation is directly linked with the strategy of the hospital. Strategy should drive performance management practices, like the identification of expected performance levels, the measurement of individual performance, the communication of evaluation results, etc. On the other hand, performance outcomes (e.g., productivity, advancement, discipline, pay raises) are linked to hospital results, which in turn are the main feedback for the strategy of the hospital.

## 5. CONCLUSION AND RECOMMENDATIONS

Based on the finding of the present study, it could be concluded that the methods used to measure HNs performance in general surgical units at Main Mansoura University Hospital were not integrated or depend on clear work standards to develop and improve the performance of HNs. By other neither words, performance appraisal (which should be done based

on clear standards) nor performance management (which measure and improve the performance and encourage two-way communication) are applied correctly to HNs in general surgical units at Main Mansoura University Hospital. It lead to many performance appraisal errors such as bias and halo effect which explored in decrease HNs productivity although excellent appraisal results.

Based on the findings of the present study, the following recommendations were detected:

- (1) Introduce BSC as an information system with feedback of financial and non-financial measures at all levels in nursing administration in the Main Mansoura University hospital. The success of this system depends largely as to how far a correlation between non-financial measures and financial measures could be established within the system to serve the cause and effect relationship.
- (2) The use of a 360-degree feedback process should be linked to an annual re-administration, say prior to each new performance management cycle in order to quantify the changes in rater perceptions as a result of the implementation of the learning and development plans and as a basis for an integrated process for making career decision.
- (3) The usual security and confidentiality safeguards associated with 360 feedback need to be reinforced, especially because of the added sensitivity of the link to performance management
- (4) Link 360 feedback as one of a number of performance assessment criteria with BSC that would assess perspectives such as patient service, internal processes, innovation and learning and financial measures.
- (5) Involvement and ownership of HNs to ensure they create 'measures that matter' (to them as well as the hospital – staff have to see the value in the measure to choose to be motivated to deliver).
- (6) Effective, challenging yet realistic target setting and training supervisors to establish standards and criteria of performance appraisal agreed with HNs job description which are reliable, measurable, feasible and able to apply in real situations and according to innovations in nursing profession.
- (7) Combine 360 degree feedback with BSC in HNs performance appraisal through inclusive and visionary leadership to understand and champion the concept, set effective targets and maintain the enthusiasm whilst the system becomes embedded.

## CONFLICTS OF INTEREST DISCLOSURE

The author declares that there is no conflict of interest.

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