Constructing a nurse appraisal form: A Delphi technique study

Ashraf Ahmad Zaher Zaghloul[1]
May Kosay AlSokair[2]

[1]Health Planning and Administration, Department of Health Administration and Behavioural Sciences, High Institute of Public Health, University of Alexandria, Alexandria, Egypt; [2]Saad Specialist Hospital, Al-Khobar, Eastern Province, Kingdom of Saudi Arabia

Objective: The study was conducted with the aim to construct a unified nurse appraisal format to be used at hospitals performing under different healthcare organizations in the Eastern Province in the Kingdom of Saudi Arabia.

Methodology: The study included hospitals representing different healthcare organizations within the Eastern Province. The target population included Hospital head nurses and nurse supervisors and the snowball sampling technique was employed to select the panel subjects.

Results: The final draft resulted into the agreed upon performance dimensions which included namely; quality standards, work habits, supervision/leadership, staff relations and interpersonal skills, attendance and punctuality, problem solving, oral communication, productivity results, coordination, innovation, record keeping.

Conclusion: Nurse managers have to continuously assess competence of practicing nurses to assure qualified and safe patient care. A nurse appraisal form was constructed concurrently with this study results and was proposed to be used at all Eastern Region hospitals. This study is considered an initial step for further efforts and studies to be conducted to reach both national and international nursing appraisal dimensions and unify them for the sake of best health promotion.

Keywords: nurse, performance, appraisal, Delphi, snowball

Introduction

Nursing is a large and complex profession and academic discipline. It encompasses autonomous and collaborative care of individuals of all ages, families, groups and communities, sick or well and in all settings. Nursing includes the promotion of health, prevention of illness, and the care of ill, disabled and dieing people. Advocacy, promotion of a safe environment, research, participation in shaping health policy and in patient and health systems management, and education are also key nursing roles (Morolong and Chabeli 2005).

The knowledge base for nursing is broad-based encompassing natural, human and social sciences (Meretoja et al 2004). Nursing work involves assisting people whose autonomy is impaired, who may present with a range of disabilities or health-related problems, to perform a range of activities, sometimes acting for, or on behalf of the patient. A defining feature of nursing is that it provides twenty-four hour care with a focus on meeting people's intimate needs (Squires 2004).

Nurses develop a plan of care, sometimes working collaboratively with physicians, therapists, the patient, the patient's family and other team members. The nursing career structure varies considerably throughout the world. Typically there are several distinct levels of nursing practitioners, distinguished by increasing education, responsibility and skills. The major distinction is between task-based nursing and professional nursing (Tzeng and Ketefian 2003).

If nurses are to develop their role in health promotion, then it is important to consider the competencies that they require in order to fulfill such a role. Nursing

Correspondence: Ashraf Ahmad Zaher Zaghloul
Department of Health Administration and Behavioural Sciences, High Institute of Public Health, University of Alexandria, 165, El-Hadara-El-Horreya Avenue, Alexandria, Egypt
Tel +966 050 984 1602
Email grendol@hotmail.com

competence requires the development of technical, cognitive, and interpersonal skills and involves a variety of different ways of knowing and understanding. Nursing programs involve integrated study of the knowledge, skills, and values from a range of subject disciplines applied to the practice of nursing. Technical skills are the most visible part of some branches of nursing while for other branches interpersonal skills are the primary focus. Through their educational preparation, nurses become equipped to understand, contribute to, and work within the context of their profession and to analyse, adapt to, manage, and eventually lead the processes of change (Irvine 2005; Tabarikhomeiran et al 2006).

Given the complex nature of nursing and diversity of healthcare situations encountered, nurses must be skilled practitioners, knowledgeable in a range of subjects, and able to appraise and adopt an enquiry-based approach to the delivery of care (Irvine 2005).

Efforts to evaluate the quality of medical care are becoming more explicit and more intensive (Wilson et al 2003). Reacting with the significance of nursing role and the care provided by them, it is an important issue to assure the quality of the services they are giving from different aspects and dimensions which can be best done through performance appraisal (Hader et al 1999).

The purpose of performance evaluation for any category of employee is to document strengths and weaknesses and to pinpoint areas for improved performance. For professional employees, evaluation is, primarily, a way to document growth in the profession. Although professional growth is of primary importance, evaluation may also be used to document performance problems and deficiencies (Hader et al 1999; Tzeng and Ketefian 2003). Literature on nurse performance appraisal in Saudi Arabia is deficient not to mention absent, as well as different methods and formats of performance appraisal are implemented at the different healthcare organizations and health settings. In terms of fairness, the appraisal of any profession is best appraised through a unified performance appraisal.

A useful method for gaining consensus towards an appraisal format construction is the Delphi technique which is a way of obtaining group input for ideas and problem-solving (Pelletier et al 1997).

The study was conducted to asses the current nurse appraisal forms used in hospitals performing under different healthcare organizations at the Eastern Province in the Kingdom of Saudi Arabia with the aim to reach a consensus on a unified format.

Methodology

Aim of the study

The study was conducted to describe the current nurse appraisal forms used in hospitals performing under different healthcare organizations at the Eastern Province in the Kingdom of Saudi Arabia and reach a consensus on a unified performance appraisal format.

Study design

A Methodological study describing head nurses' opinions as regards appraisal forms used in different hospitals within the Eastern region to understand and pinpoint important aspects and dimensions to be appraised regarding nursing skills and proficiency.

Study setting

The study included hospitals representing different healthcare organizations within the Eastern region namely: Al-Dammam Central Hospital (316-bed hospital) representing the governmental sector, Al-Manea General Hospital (273-bed hospital) representing the private sector, and Al-Fanateer Hospital (216-bed hospital) representing the Medical Royal Commission Organisation.

Target population

Hospital head nurses and nurse supervisors.

Sampling design

The Snowball sampling technique was employed to select the panel subjects. It is a special nonprobability method used often in hidden populations which are difficult for researchers to access or when the desired sample characteristic is rare. Snowball sampling relies on referrals from initial subjects to generate additional subjects. Thus the sample group appears to grow like a rolling snowball. This process is based on the assumption that a 'bond' or 'link' exists between the initial sample and others in the same target population, allowing a series of referrals to be made within a circle of acquaintance. The first head nurse included in the study at each hospital introduced other head nurses to join the study and so on with the rest which resulted in panel of 42 head nurses and nurse supervisors (Kaplan et al 1987; Faugier and Sargeant 1997).

Data collection started on 1st March and ended on 30th April 2006.

Data collection method

Two different questionnaires were distributed for each Delphi round.

First round

The first questionnaire distributed aimed to elicit the head nurses' opinions about two aspects:

(a) The dimensions pertinent to nurse performance appraisal were a result of a thorough review of the literature. The literature was viewed as an "expert panel" and assisted in the development of the 18 pre-determined exclusive dimensions of the first opinionnaire. Each of the 18 dimensions included, had its own explanatory note and examples.

(b) The format they prefer when designing the appraisal's layout.

The dimensions in the first part of the questionnaire were: Attendance and Punctuality (the degree to which the nurse can be dependent upon to be available for work and to fulfill position responsibilities), Work Habits (the manner in which the nurse conducts herself in the work environment), Staff Relations (the degree to which the nurse creates and maintains effective supervisor/staff relations), Oral Communication (Communicating effectively, thoroughly, and accurately to an individual or group of individual), Productivity Results (the degree to which the nurse oversees the work flow and processes of a work unit, division or department), Supervision (the extent to which the nurse shows the ability to authorize work and supervise assigned staff), Quality Standards (Maintaining acceptable standards for ensuring that services meet reliability and quality standards established by the organization), Problem Solving (Applying knowledge to solve job related problems for timely corrective action), Writing/Drawing (Preparing reports or other documents in written or pictorial form), Record Keeping (Maintaining the documentation system and keeping accurate records), Work Planning (Planning for both short term and long range goal achievement), Financial Planning (Estimating and monitoring expenses to achieve cost effectiveness), Material Planning (Allocating materials to optimize utilization of resources), Coordination (Negotiating and cooperating with others to accomplish optimal utilization of available resources), Directing Others (Serving as the head of a team/unit responsible for a given project(s)), Know-How (Keeping up-to-date technically), Effort/Persistence (Persisting with special efforts to reach goals), and Innovation (Originating and developing ideas for improving products/services). Each dimension had three responses to choose one from;

- (Yes) when agreeing to include the dimension.
- (Can't tell) when the respondent was not sure.
- (No) when disagreed.

The second part included four types of formatting: checklist, graphic rating scale, narrative or essay writing, and ranking, with a check box next to each to choose the one preferred. Appendix (A) shows the first round questionnaire.

Second round

After analysing the first round's responses, it was found that the majority of the panelists agreed upon 11 dimensions to be included in a nurse appraisal form including: Attendance and Punctuality, Work Habits, Staff Relations and Interpersonal Skills, Oral Communication, Productivity Results, Supervision/Leadership, Quality Standards, Problem Solving, Record Keeping, Coordination, and Innovation.

The second questionnaire aimed to:

(a) Prioritize and rank the final eleven appraisal dimensions from 1 to 11 according to their importance where number 1 possesses the highest rank, then sum of ranks for each dimension was calculated where the highest rank accounted for the lowest score.

(b) Gain consensus and weigh the panellists' agreement about the appraisal's face sheet items.

Appendix (B) shows the second round questionnaire.

Data analysis

Frequencies and descriptive statistics were calculated as appropriate using the Statistical Package of Social Sciences (SPSS version 10) to summarize the closed questions of the opinionnaire.

Ethical considerations

The study was conducted in accordance with the following ethical considerations:

1. The participation was purely voluntarily on the panelists' behalf. No pressure or inducement of any kind was applied to encourage an individual to become a panelist of the study research.
2. Before participation, all panelists were notified about the project's aim, objectives, and methods.
3. Any panelist had the right to abstain from participation in the research and to terminate at any time the participation.
4. The identity of individuals from whom information is obtained in the course of the project was kept strictly confidential. No information revealing the identity of any individual was included in the final report or in any other communication prepared in the course of the project.

Results

Employing the Snowball sampling technique, a panel of 42 head nurses and nurse supervisors resulted. Table 1 shows

Table 1 Demographic characteristics of the panelists, Al-Dammam 2006

Demographic characteristics	No. (n = 42)	%
Age intervals		
20–<30	4	9.5
30–<40	11	26.2
40–<50	20	47.6
50+	7	16.7
Years of experience		
less than 5	4	9.5
5–<10	5	11.9
10–<15	8	19.0
15–<20	10	23.8
20+	15	35.7
Nationality		
Saudi	5	11.9
Non-Saudi	37	88.1

the demographic characteristics of the panelists. The panelists consisted of 11.9% Saudi and 88.9 non-Saudi head nurses and nurse supervisors with different ages ranging from 24 to 59 years where the age interval (40–50 years) yielded the highest percentage of 47.6% with mean and standard deviation 41.5 ± 8.1. Their years of experience varied also ranging from 1 to 38 years where the interval of (20–30 years) resulted in the highest percentage of 35.7% with mean and standard deviation 17 ± 8.3.

First round

Table 2 shows the inclusion opinions' percentages according to the panelists. The first section of the opinionnaire resulted in different responses regarding the nurse appraisal dimensions inclusion, some of which got total agreement while others showed hesitant opinions. Attendance and Punctuality, Quality Standards, and Record Keeping all got 100% inclusion agreement. Oral Communication and Staff Relations got 97.6%. Work Habits, Effort/Persistence, Directing Others, Problem Solving, and Coordination got 95.2%. Productivity Results and Innovation got 92.9% and 92.8% respectively. Supervision got 90.5% and similar to it is Material Planning which resulted in 90%. The rest dimensions got weak inclusion opinions namely: Know-How 85.5%, Work Planning 85%, Writing/Drawing 80.5%, and Financial Planning 43.6% which was the weakest opinion.

Table 3 shows the responses' results and percentages of each format type to be chosen. Most panelists' responses concentrated in choosing the checklist format for designing the appraisal with a percentage of 62.9%, while the rest formats resulted in the following percentages: Ranking 25.7%, Graphic Rating Scale 5.7%, and Narrative or Essay Evaluation 5.7%.

Second round

Before designing the second questionnaire, a cut-off point was set to filter resulted responses to choose dimensions to be included which was 90% of response result. Only 11dimensions out of 18 were included in this round to be ranked according to their importance in the panellists point of view, namely: Attendance and Punctuality, Quality Standards, Record Keeping, Oral Communication, Staff Relations, Work Habits, Effort/Persistence, Directing Others, Problem Solving, Coordination, Productivity Results, Innovation, and Supervision with some adjustments and modifications to the dimensions titles and aspects within the appraised dimensions. Modified dimensions were: Work Habits, Oral Communication, Staff Relations and Interpersonal Skills, Supervision/Leadership, and Record Keeping.

Table 4 shows the ranked dimensions according to their scores. The second section ranked the 11 dimensions according to the panelists' point of view from 1 to 11 with the highest priority getting the lowest rank (1) and the least important given rank (11) resulting in a total of 2743 points from all 42 panelists. As a result, dimensions were arranged in the final constructed version as follows: Quality Standards (134), Work Habits (177), Supervision/Leadership (201), Staff Relations and Interpersonal Skills (214), Attendance and Punctuality (231), Problem Solving (245), Oral Communication (257), Productivity Results (260), Coordination (300), Innovation (347), then Record Keeping (377).

Table 5 shows the weights of each item to be included in the face sheet. The first section of the questionnaire aimed to asses the panelists' opinions about the first version appraisal's face sheet constructed. All responses resulted in high agreement about all items included in the face sheet with percentages higher than 90%.

Discussion

This study aimed at constructing a nurse appraisal form building upon head nurses and nurses' supervisors' consensus towards dimensions to be included in the form. Appraisal has been recognized as an essential step for an organization to move forward, comprising an objective evaluation of an employee's performance and an outline of measures to be taken for improvement (Morolong and Chabeli 2005). For this reason, it was found a worthwhile step to be taken when trying to reach consensus from people who are considered first line supervisors and can easily identify important tasks and skills to be fulfilled. To reach consensus, the modified Delphi technique was applied.

Table 2 Inclusion of opinions percentages according to the panelists, Al-Dammam 2006

Dimension name	Weight					
	No. agreed	%	No. not sure	%	No. disagreed	%
Attendance and punctuality *(n = 42)*	42	100	-	0.0	-	0.0
Quality standards *(n = 42)*	42	100	-	0.0	-	0.0
Record keeping *(n = 41)*	41	100	-	0.0	-	0.0
Oral communication *(n = 42)*	41	97.6	-	0.0	1	2.4
Staff relations *(n = 41)*	40	97.6	-	0.0	1	2.4
Work habits *(n = 42)*	40	95.2	1	2.4	1	2.4
Effort/Persistence *(n = 42)*	40	95.2	1	2.4	1	2.4
Directing others *(n = 42)*	40	95.2	2	4.8	-	0.0
Problem solving *(n = 41)*	39	95.2	1	2.4	1	2.4
Coordination *(n = 41)*	39	95.2	1	2.4	1	2.4
Productivity results *(n = 42)*	39	92.9	3	7.1	-	0.0
Innovation *(n = 42)*	39	92.8	1	2.4	2	4.8
Supervision *(n = 42)*	38	90.5	4	9.5	-	0.0
Material planning *(n = 40)*	36	90	4	10	-	0.0
Know-how *(n = 42)*	36	85.8	3	7.1	3	7.1
Work planning *(n = 40)*	34	85	4	10	2	5
Writing/Drawing *(n = 41)*	33	80.5	5	12.2	3	7.3
Financial planning *(n = 39)*	17	43.6	16	41	6	15.4

First round

The first round of the classic Delphi technique begins with an open-ended questionnaire that is given to a panel of selected experts to solicit specific information about a subject or content area. In subsequent rounds of the procedure, participants rate the relative importance of individual items and also make changes to the phrasing or substance of the items. The modified Delphi technique is similar to the full Delphi in terms of procedure (ie, a series of rounds with selected experts) and intent (ie, to predict future events and to arrive at consensus). The major modification consists of beginning the process with a set of carefully selected items. These pre-selected items may be drawn from various sources including related competency profiles, synthesized reviews of the literature, and interviews with selected content experts (Custer et al 1999). As there is no ideal sample size for Delphi techniques, there was no set or pre-determined number to select the panelists upon. The panelists' expertise is what counts when developing a panel. For this reason, the 42-participant panel was found good when keeping in mind that they are head nurses and nurses' supervisors. The first questionnaire distributed consisted of two sections: the first including 18 appraisal dimensions to choose among, and the second included 4 appraisal formats by which the form is to be designed. As with the first section, the 18 dimensions were specific enough to save the panelists' effort of thinking and generating aspects which are thought important to appraise a nurse's skills and abilities. This was because panelists were found busy all the time where the researcher could barely keep them to fill out the questionnaire. Three dimensions got 100% inclusion agreement, namely: Attendance and Punctuality, Quality Standards, and Record Keeping. At the same time, those dimensions had different importance in the appraisal literature. Reviewing 25 different studies and published appraisal forms, two only mentioned Attendance and Punctuality (Duffield et al 1993; Irvine 2005). six asked about Quality standards sometimes with different names, (Hader et al 1999; Staggers et al 2002; Meretoja and Leino-Kilpi 2003; Meretoja et al 2004; Squires 2004), and two studies had Record Keeping as in item in them (Peters et al 2001; Meretoja et al 2004) Although the rest of the dimensions didn't reach the 100% inclusion agreement, yet the literature shows the significant roles of such dimensions in nurse appraisal forms. Work Planning had the greatest attention being mentioned in a large number of papers (Duffield 1993; Misener et al 1997; Hader et al 1999; Staggers et al 2002; Gibson et al 2003; Meretoja and Leino-Kilpi 2003;

Table 3 Responses' results and percentages of each format type to be chosen, Al-Dammam 2006

Format type	Weight (n = 35)	
	No.	%
Checklists	22	62.9
Ranking	9	25.7
Graphic rating scale	2	5.7
Narrative or essay evaluation	2	5.7

Table 4 Ranking dimensions according to their scores, Al-Dammam 2006

Dimension name	Score	Rank
Quality Standards	134	1
Work Habits	177	2
Supervision/Leadership	201	3
Staff Relations and Interpersonal Skills	214	4
Attendance and Punctuality	231	5
Problem Solving	245	6
Oral Communication	257	7
Productivity Results	260	8
Coordination	300	9
Innovation	347	10
Record Keeping	377	11

Meretoja et al 2004; Okura 2004; Squires 2004; Irvine 2005; Morolong and Chabeli 2005; Tabarikhomeiran et al 2006) Coordination also had great attention but was mentioned in a less number of studies (Duffield et al 1993; Hader et al 1999; Peters et al 2001; Roberts-Davis and Read 2001; Meretoja et al 2002, 2004; Staggers et al 2002; Meretoja and Leino-Kilpi 2003; Okura 2004; Irvine 2005; Tabarikhomeiran et al 2006), showing how different directions are between what was found in the literature and what resulted here where it got ranked as the ninth important dimension. Other dimensions were found even in the number of studies being mentioned in, namely: Staff Relations (Duffield et al 1993; Roberts-Davis and Read 2001; Wilson et al 2003; Okura 2004; Squires 2004; Irvine 2005; Morolong and Chabeli 2005; Tabarikhomeiran et al 2006), Productivity Results (Peters et al 2001; Staggers et al 2002; Gibson et al 2003; Meretoja and Leino-Kilpi 2003; Wilson et al 2003; Okura 2004; Irvine 2005; Morolong and Chabeli 2005; Tabarikhomeiran et al 2006), and Supervision (Duffield 1993; Duffield et al 1993; Hader et al 1999; Peters et al 2001; Roberts-Davis and Read 2001; Meretoja and Leino-Kilpi 2003; Squires 2004; Irvine 2005; Morolong and Chabeli 2005). Another group of studies less frequently mentioned Work Habits (Harder et al 1999; Peters et al 2001; Duffield 1993; Gibson et al 2003; Meretoja and Leino-Kilpi 2003; Squires 2004; Irvine 2005), one of which mentioned it four times with different names (Squires 2004) and Effort/Persistence (Duffield et al 1993; Peters et al 2001; Roberts-Davis and Read 2001; Gibson et al 2003; Meretoja et al 2004; Squires 2004; Morolong and Chabeli 2005). Oral Communication was mentioned in a fewer number of studies (Duffield et al 1993; Peters et al 2001; Roberts-Davis and Read 2001; Staggers et al 2002; Gibson et al 2003; Meretoja et al 2004; Morolong and Chabeli 2005). Fewer number of studies mentioned Problem Solving (Hader et al 1999; Wilson et al 2003; Meretoja et al 2004), Innovation (Duffield et al 1993; Roberts-Davis and Read 2001; Meretoja et al 2004), and Writing/Drawing (Duffield et al 1993; Gibson et al 2003; Meretoja et al 2004), Directing Others (Meretoja et al 2004; Morolong and Chabeli 2005), and Financial Planning (Meretoja et al 2004; Squires 2004) both got fair attention. Material Planning and Know-How were the least mentioned dimensions where both were mentioned once in the same published performance appraisal among the studies reviewed (Meretoja et al 2004). The differences found in this study compared to other studies were the result of various factors including different points of view towards the importance of each dimension based upon the person's/people's opinions to that dimension or how the organization itself defines that dimension, or the different names or titles for the same dimension depending on how it is being viewed and understood, not to mention different categorization of competency aspects leading to the inclusion of one dimension's aspect into another.

The second part concerning the appraisal format to be designed showed how most of the panelists agreed on choosing the checklist format giving the result of 62.9% of the total responses. Searching the literature revealed that almost all of the total studies and papers viewed used the Graphic Rating Scale format (Duffield et al 1993; Hader et al 1999; Roberts-Davis and Read 2001; Staggers et al 2002; Meretoja and Leino-Kilpi 2003; Wilson et al 2003; Meretoja et al 2004; Squires 2004; Irvine 2005) where some combined it with Narrative or Essay writing (Meretoja and Leino-Kilpi 2003; Meretoja et al 2004), and rarely the Narrative or Essay Writing format was found used alone (Tabarikhomeiran et al 2006), but neither the Checklist nor the Ranking format were used. This is again a result of the different needs defined by each organization/hospital.

Table 5 Weights of each item to be included in the face sheet, Al-Dammam 2006

Face sheet items	Agreement (n = 42)			
	No. agreed	%	No. disagreed	%
Department name	41	97.6	1	2.4
Appraiser name	41	97.6	1	2.4
Nurse name	40	95.2	2	4.8
Nurse ID	40	95.2	2	4.8
Nurse nationality	38	90.5	4	9.5
Date of appraisal	42	100	0	0.0
Date of next appraisal	39	92.9	3	7.1
Appraisal results	38	90.5	4	9.5
Guidelines	41	97.6	1	2.4

Some studies indicated that consensus occurs when there is a convergence of opinion amongst participants. Published studies set consensus at different levels, using different measurements such as percentages, median scores, and standard deviation (Irvine 2005). This study used percentages to measure consensus. After analyzing responses gained from panelists and studying the weights and percentages each dimension got, a cut-off point was set to determine which dimensions to be included; or criterion for consensus in other words. This cut-off point was 90% of the inclusion agreement. Any dimension resulted in a less percentage was excluded from the second round opinionnaire namely: Know-How, Work Planning, Writing-Drawing, and Financial Planning. Some refinements and modifications were made to the final dimensions resulted, such as combining overlapped or similar dimensions or altering wording to be more specific about the intended outcomes similar to other studies (Custer et al 1999; Gibson et al 2003). The first round resulted in the following eleven dimensions to be arranged in a check list format performance appraisal: Quality Standards, Work Habits, Supervision/Leadership, Staff Relations and Interpersonal Skills, Attendance and Punctuality, Problem Solving, Oral Communication, Productivity Results, Coordination, Innovation, and Record Keeping.

Second round

Studies employing the modified Delphi technique usually aim at the second round to get more focused on results gained from the first round. In this study, the second questionnaire aimed at ranking dimensions according to the panelists' opinions and to reach consensus about the first draft of performance appraisal constructed. The results are found in Table 4 where Quality Standards and Work Habits got ranked as the most important two dimensions, but, on the other hand, Record Keeping was the least important can be viewed as the results of several factors. In today's world, healthcare delivery systems are rapidly changing. Many countries are experiencing nurse shortages and economic constraints leading to demands for greater cost-effectiveness. Healthcare services nowadays are more quality oriented. Given the serious epidemics and further economic burden on our already strained healthcare systems, consumers must be armed with information that allows them to make quality-oriented healthcare choices about patient safety (Tabarikhomeiran et al 2006). In fact, "quality" has become a major buzzword with many meanings and uses. Owing to those reasons and more, quality has been ranked as the number one dimension and given the highest priority.

The second most important dimension found was the nurse's working habits. Since nurses are a professional group most likely to interact with patients, their families, and hospital staff, it is perceived highly important to appraise and evaluate the nurse's working habits to pledge patients' and environment's safety through assuring compliance with policies, rules and regulations are followed.

Record keeping was ranked as the least important dimension to be appraised in the nurse due to the lack of importance given to medical records by hospital administrations from my own point of view. From my personal experience in hospitals here in the Easter Region, especially governmental hospitals, medical records were given slight attention, lacking its importance and its impact on care provided to patients, administrative decisions made using information from it, and its usage for further studies and research.

This round ended with eleven ranked dimensions, each contained 3 mutually exclusive aspects to look for when appraising a nurse, giving the result of 33 competency aspects to be fulfilled to ensure good healthcare promotion.

Regarding the first draft designed for the performance appraisal, high consensus was gained for all items included and arranged in the form. Whereas, most of the items got consensus above 95% except for nurse nationality, date of next appraisal and appraisal results.

Study limitations

Due to the work load of panelists, some items in the first round questionnaire were left empty affecting the results when comparing dimensions' inclusion opinions of those which got complete response with others having missing responses. Another limitation found was when completing the second questionnaire. Some panelists did not complete the second part when they were asked about the performance appraisal's first draft. It wasn't understood whether they were satisfied with its items and layout or again because they were too busy to take a look at it.

Conclusion

Nurses should maintain and demonstrate competence throughout their professional career. Nurse managers have to continuously assess competence of practicing nurses to assure qualified and safe patient care (Wilson et al 2003). Consensus was reached among panellists regarding dimensions and aspects to look at when appraising nurse's performance. Those dimensions were ranked according to the panelists' points of view as following: Quality Standards, Work Habits, Supervision/Leadership, Staff Relations and Interpersonal Skills, Attendance and Punctuality, Problem Solving, Oral Communication, Productivity Results,

Coordination, Innovation, and Record Keeping. A nurse appraisal form was constructed concurrently with this study results and is proposed to be used at all Eastern Region hospitals (Appendix C). This study is considered an initial step for further efforts and studies to be conducted to reach both national and international nursing appraisal dimensions and unify them for the sake of best health promotion.

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Appendix A

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جامعة الملك فيصل
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كلية العلوم الطبية التطبيقية
HEALTH INFORMATION SYSTEM DIVISION
قسم تقنية المعلومات الصحية

What to Appraise?

This questionnaire is to measure your opinion about what items to be included or excluded from the appraisal form used to evaluate nurse performance. Kindly place (✓) next to the option that satisfies your opinion.

Age: _____ **Nationality:** ☐ Saudi ☐ Non-Saudi **Years of experience:** _____

Appraisal dimension	Inclusion
1. Attendance and Punctuality *(the degree to which the nurse can be dependent upon to be available for work and to fulfill position responsibilities).* • Work is begun on time. • Partial and full day absences are kept within guidelines. • Job responsibilities are covered when absent.	☐ YES ☐ Can't tell ☐ NO
2. Work Habits *(the manner in which the nurse conducts herself in the work environment).* • Applicable laws, rules, policies, and directives are observed. • Safety standards and procedures are followed.	☐ YES ☐ Can't tell ☐ NO
3. Staff Relations *(the degree to which the nurse creates and maintains effective supervisor/staff relations).* • Fair and equitable treatment of staff is observed. • Work environment is safe and free from harassment.	☐ YES ☐ Can't tell ☐ NO
4. Oral Communication: *{Communicating effectively, thoroughly, and accurately to an individual or group of individual}.* • Communicating ideas add opinions in a clear and concise manner. • Providing complete, reliable, and prompt information to superiors; haring information required by other employees and organizational units to achieve their objectives.	☐ YES ☐ Can't tell ☐ NO
5. Productivity Results *(the degree to which the nurse oversees the work flow and processes of a work unit, division, or department).* • Decisions made are timely and appropriate to the situation. • Problems and challenges are handled with proficiency. • Expected results are achieved on time and within budget.	☐ YES ☐ Can't tell ☐ NO
6. Supervision *(the extent to which the nurse shows the ability to authorize work and supervise assigned staff).* • Work schedules are established and monitored for effectiveness. • Directives given are clear and communicated in a timely manner. • Recognition and staff development opportunities are appropriately provided. • Thorough and timely action is taken in response to poor performance.	☐ YES ☐ Can't tell ☐ NO

7. **Quality Standards:** *{Maintaining acceptable standards for ensuring that services meet reliability and quality standards established by the organization}*.
   - Completing work according to specifications.
   - Conducting evaluations to assure that equipment is in good operating order.

☐ YES ☐ Can't tell ☐ NO

8. **Problem Solving:** *{Applying knowledge to solve job related problems for timely corrective action}*.
   - Identifying and anticipating potential problems for timely corrective action.
   - Determining which problems require immediate attention.
   - Assessing the strengths and weaknesses of solutions and developing effective action plans.

☐ YES ☐ Can't tell ☐ NO

9. **Writing/Drawing:** *{Preparing reports or other documents in written or pictorial form}*.
   - Writing concise, organized, and easy-to read technical articles, correspondence, manuals, minutes of meetings, etc.
   - Providing others with complete and accurate written directions.

☐ YES ☐ Can't tell ☐ NO

10. **Record Keeping:** *{Maintaining the documentation system and keeping accurate records}*.
    - Knowing what the key details are and how/when to document them.
    - Processing paper work quickly, accurately, and with close attention to important details.

☐ YES ☐ Can't tell ☐ NO

11. **Work Planning:** *{Planning for both short term and long range goal achievement}*.
    - Prioritizing tasks to assure optimum allocation of time.
    - Modifying plans to adjust for unforeseen situations such as changes in resources, organization, policies, and technology.
    - Developing work plan consistent with department needs.

☐ YES ☐ Can't tell ☐ NO

12. **Financial Planning:** *{Estimating and monitoring expenses to achieve cost effectiveness}*.
    - Providing accurate time and cost estimates/forecasts of current or proposed projects.
    - Notifying/justifying to management expected deviations from current budget
    - Controlling expenses within the budget.

☐ YES ☐ Can't tell ☐ NO

13. **Material Planning:** *{Allocating materials to optimize utilization of resources}*.
    - Assessing needs for equipment, materials, and processing.
    - Utilizing available materials and methods to ensure completion of high quality work at minimum costs.
    - Organizing work site in such a way that it is neat and clear of potential hazards.

☐ YES ☐ Can't tell ☐ NO

14. **Coordination:** *{Negotiating and cooperating with others to accomplish optimal utilization of available resources}*.
    - Gaining the understanding, support, and effective action of team members.
    - Utilizing available support services effectively.
    - Coordinating the efforts of several units (or vendors) to achieve overall objectives with maximum efficiency.

☐ YES ☐ Can't tell ☐ NO

15. **Directing Others:** *{Serving as the head of a team/unit responsible for a given project(s)}*.
    - Scheduling, assigning, and/or delegating work among employees to ensure maximum resource utilization.
    - Organizing team efforts to achieve project objectives within established deadlines and financial constraints.

☐ YES ☐ Can't tell ☐ NO

16. Know-How: *{Keeping up-to-date technically}*.

- Serving as a "resource person" on whom others rely for technical advice.

☐ YES
☐ Can't tell
☐ NO

17. Effort/Persistence: *{Persisting with special efforts to reach goals}*.

- Striving to achieve objectives beyond what is expected or required.
- Displaying responsibility, initiative, and conscientiousness in completing assigned projects.
- Demonstrating effort and success at self-improvement.

☐ YES
☐ Can't tell
☐ NO

18. Innovation: *{Originating and developing ideas for improving products/services}*.

- Developing new solutions to old problems.
- Exhibiting original thinking, ingenuity, and creativity in the development of new or improved methods or approaches.
- Anticipating important changes which may affect the job and capitalizing on them.

☐ YES
☐ Can't tell
☐ NO

Appraisal Format	☐ Checklists.	☐ Graphic Rating Scale.
	☐ Narrative or Essay Evaluation	☐ Ranking.

THANK YOU

Appendix B

Hospital Name

Nurse Appraisal Form

Department:	
Appraiser Name:	**Nurse Name:**
Nurse ID:	**Nurse Nationality:**
Date of Appraisal: ___/___/_____	**Date of Next Appraisal: ___/___/_____**

APPRAISAL RESULTS	
Points Collected	
Performance Evaluation	

Appraisal form guide lines:

1. This appraisal aims to evaluate every aspect a nurse is supposed to perform within different dimensions to ensure the quality of care provided.
2. All items are to be completed for the best results to be achieved.
3. The appraiser is to look after each item included in the form and place (ü) next to it whenever found applicable; otherwise the item will be kept empty.
4. For each dimension a subtotal out of 3 should be calculated.
5. At the end of the appraisal, a grand total is calculated by adding the sum of all sub-totals to give the final points collected.
6. The points collected are then compared against the list of performance evaluation to give the corresponding one.
7. The results are to be recorded on the cover sheet.

Appendix C

Kindly rank the following appraisal dimensions according to their importance from 1-11:

Attendance and Punctuality	1. Work is begun on time.	☐	/3
	2. Partial and full day absences are kept within guidelines.	☐	
	3. Job responsibilities are covered when absent.	☐	
Work Habits	1. Follows laws, rules, policies, and directives.	☐	/3
	2. Follows safety standards and procedures.	☐	
	3. Serves as a "resource person" on whom others rely for an advice.	☐	
Staff Relations and Interpersonal Skills	1. Fair and equitable treatment of staff is observed.	☐	/3
	2. Work environment is safe and free from harassment.	☐	
	3. Works well as a team member.	☐	
Oral Communication	1. Communicates ideas and opinions in a clear and concise manner.	☐	/3
	2. Provides complete, reliable, and prompt information to superiors to achieve their objectives.	☐	
	3. Communicates effectively and accurately to an individual or group of individuals.	☐	
Productivity Results	1. Decisions made are timely and appropriate to the situation.	☐	/3
	2. Expected results are achieved on time and within budget.	☐	
	3. Striving to achieve objectives beyond what is expected or required.	☐	
Supervision/Leadership	1. Gives clear directives and communicates them in a timely manner.	☐	/3
	2. Organizes team efforts to achieve objectives within established deadlines and financial constraints.	☐	
	3. Thorough and timely action is taken in response to poor performance.	☐	
Quality Standards	1. Maintains acceptable standards for ensuring that services meet reliability and quality standards established by the hospital.	☐	/3
	2. Completes work according to specifications.	☐	
	3. Conducts evaluations to assure that equipment is in good operating order.	☐	
Problem Solving	1. Identifies and anticipates potential problems for timely corrective action.	☐	/3
	2. Determines which problems require immediate attention.	☐	
	3. Assesses the strengths and weaknesses of solutions and developing effective action plans.	☐	

Record Keeping	1. Knows what the key details are and how/when to document them.	☐	
	2. Processes paper work accurately, in a timely manner, and with close attention to important details.	☐	/3
	3. Providing others with complete and accurate written directions.	☐	
Coordination	1. Cooperates with others to accomplish optimal utilization of available resources.	☐	
	2. Gains the understanding, support, and effective action of team members.	☐	/3
	3. Coordinates the efforts of several units to achieve overall objectives with maximum efficiency.	☐	
Innovation	1. Developing new solutions to old problems	☐	
	2. Exhibiting original thinking, ingenuity, and creativity in the development of new or improved methods or approaches.	☐	/3
	3. Anticipating important changes which may affect the job and capitalizing on them.	☐	