

Competence of Nurses' Managers in Different Work Environment at Assiut University Hospitals

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Abstract: Background: Healthcare providers are increasingly inclined to question the quality and efficacy of the care they provide. Nurse competence plays an important role in guaranteeing the quality of nursing interventions and outcomes. It is claimed that a key responsibility of nurse administrators is to ensure staff nurse competence. Nurses should maintain and demonstrate competence throughout their professional career. Nurse Managers have to continuously assess safe patient care. Aim of the Study: to assess competence of nurses' managers at different work environment at Assiut University Hospitals, and compare nurse's competence at different work environments at Assiut University Hospitals. Subject and Methods: the present study is descriptive, was conducted in all units of Assiut University Hospitals. It included all nurses' managers who are working in different departments at the time of the study. A personal interview questionnaire sheet which consist of two parts: ¹st Personal characteristics data which include name, age, department, marital status, educational level, position, years of experience and years of experience of the present position (head nurse, supervisor, assistant director, director of nursing), ²nd Nurse Competence Scale (NCS) was consisted of seventy three items structured in seven competence categories: helping role (seven items), teaching- coaching (sixteen items), diagnostic functions (seven items), managing situations (eight items), therapeutic interventions (ten items), ensuring quality (six items) and work role competences (nineteen items). The Scoring System was four-point scale (0 = not applicable in my work, 1 = very seldom, 2 = occasionally and 3 = very often in my work). The levels of competence are measured with a Visual Analogue Scale (VAS 0-100 mm), which the total score of the VAS with 0 meaning a very low level of competence, 1-30 mild level of competence, 31-60 good level of competence, 61-99 excellent level of competence and 100 a very high level of competence. Results: the nurses' managers in main Assiut University Hospital are most competent than Pediatric and Women Health Hospital in all competence categories. The level of competence categories in emergency is highest than special & general, intensive care unit and operating room. The total VAS mean levels of competence of all categories ranged from 55.93 to 73.5. Conclusions: nurses' managers have excellent level of competence in work role category, followed by teaching coaching category, then in managing situation category. Main Assiut University Hospital nurses' managers are competent than Pediatric Hospital and Women Health Hospitals in all competence categories. The emergency units nurses' managers are competent than other different work settings following by operating rooms. [Kawther Abd El-Motagally Fadel, Samah Mohamed Abdalah, Fatma Rushdy Mohamed and Eman kamel hossny. competence of Nurses' Managers in Different Work Environment at Assiut University Hospitals . Journal of American Science 2011; 7(6):965-975]. (ISSN: 1545-1003). <http://www.americanscience.org>.

Key words: Competence, nurse manager, work environment.

1. Introduction:

There is no doubt that every member of the society would agree that all healthcare providers in practice should be competent. For nurses to work efficiently and effectively, the areas of competency must be identified for specific roles and settings. Competencies describe the specific job requirements and job environments. Competency-based outcome focus on education and social change abilities, including competent effective reflective practice, generation of nursing knowledge, leadership and social change in order to improved health for individuals, communities, populations, and global environments. Ministries of health, professional organizations, and healthcare organizations must ensure that appropriate expectations for competence are set, and that their staff performs to standard. Healthcare organizations must meet certain criteria to provide services. These

organizations, through certification, licensure, and/or accreditation, are able to exert control on health providers and, as a result, to influence the quality of care (Meretoja, 2004b).

With the increasing complexity of nursing services, hospital employers are demanding qualified and competent staff nurses for high quality clinical practices (Nonaka and Takeuchi, 1995). Employees' perceptions of their performance was proposed as an outcome indicator which would lead to improved quality of provided nursing services and their desire to improve themselves and participate in life-long learning. The imperativeness of studying nurses' self-assessment of their competencies is that, opportunity for learning would contribute to nurses' organizational commitment, which would in turn contribute to improved nursing performance (McNeese-Smith, 2001; Zhang et al., 2001).

Nursing competence usually is defined as personal skills developed through professional nurse training courses, and is considered to be an outcome of these courses. Competence, which is considered an individual characteristic (Archibald and Bainbridge, 1994; DeBack and Mentkowski, 1986), is a group of broad abilities and practical skills that might be changed when the environment changed.

Benner offers a framework of five stages of effective nursing practice that places the competent nurse at the third level. These five stages are: novice, advanced beginner, competent, proficient, and expert (Benner, 1982).

Nowlen (1988) discussed three models of continuing professional development: the update model, the competence model, and the performance model. In competence model, in addition to the knowledge that the professional needs, there are also personal skills (e.g., critical thinking or interpersonal relationships), personal traits (e.g., ethical, takes initiative, self directedness), and a positive self-image required of professional.

Nowadays, competence within the healthcare workforce is an important issue for educators and a concern for employers. Nurses today are required to keep pace with rapid changes in healthcare and provide quality patient care in a cost-efficient manner. Hospitals now compete with an array of outpatient agencies that offer exciting opportunities for the expert, experienced nurse. For this reason, nurse managers must seek ways in which to develop, retain, and reward competent staff (Carey and Campbell, 1994; Jasper, 1994).

Significance of the Study

Researches in nurse competence assessment and studies closely related to this concept have focused upon a relatively narrow area of clinical practice. Most of the work has concentrated on nurse students or on the nurse graduation. There is a lack of researches about assessment of levels of nurses' managers' competence. So, there are some indications that nurse competence profiles must be assessed in different work environment for different levels of nurses' managers.

Aim of the Study

The present study aims to

1. Assess competence of nurses' managers at different work environment at Assuit University Hospitals.
2. Compare nurse's competence at different work environments at Assuit University Hospitals.

2. Subject and Methods

1.1) Study Design

The present study is descriptive.

1.2) Setting

The present study was conducted in all units of Assiut University Hospitals, Main Hospital with bed capacity 1789; Pediatric Hospital with bed capacity 216; Women Health Hospital with bed capacity 303.

1.3) Subjects:-

The present study included all nurses' managers who are working in different departments at the time of the study.

In Main Hospital the total number was seventy five [one director of nursing, three assistant director, fifteen supervisors, and fifty six head nurses]. In Pediatric Hospital the total number was thirty one [one director of nursing, one assistant director, and twenty nine head nurses]. In Women Health Hospital the total number was ten [one director of nursing, one assistant director, one supervisor, and seven head nurses].

1.4) Data collection tool

A personal interview questionnaire sheet which consist of three parts.

1.4.1) Personal characteristics data

It was designed to collect personal data as name, age, department, marital status, educational level, position, years of experience and years of experience of the present position (head nurse, supervisor, assistant director, director of nursing).

1.4.2) Nurse Competence Scale (NCS)

It consists of seventy three items structured in seven competence categories: helping role (seven items), teaching- coaching (sixteen items), diagnostic functions (seven items), managing situations (eight items), therapeutic interventions (ten items), ensuring quality (six items) and work role competences (nineteen items). The competence categories were derived from Benner's model (1984) and Benner et al., (1996) competency frame work.

1.4.3) Scoring System.

The used scoring system is four-point scale (0 = not applicable in my work, 1 = very seldom, 2 = occasionally and 3 = very often in my work). The levels of competence are measured with a Visual Analogue Scale (VAS 0-100 mm), with 0 meaning a very low level of competence, 1-30 mild level of competence, 31-60 good level of competence, 61-99 excellent level of competence and 100 a very high level of competence (Meretoja & Ieino-kilphi, 2003., Meretoja et al., 2004a,b).

2. Administrative Design:

An official permission had been obtained to collect necessary data from administrative responsible personnel of Assuit University Hospitals.

3. Operational Design

3.1) Preparatory phase

This phase took about four months from November 2007 until February 2008. In review the available literatures pertinent to the study topic.

3.2) Pilot Study

A pilot study was fulfilled to test the questionnaire clarity, feasibility, and applicability. It was carried out on thirteen nurses' managers from Assuit University Hospitals. Data collected from the pilot study were analyzed, and necessary modifications were done prior to finalization of the study tool. Clarity has also served in estimating the time needed for filling the forms, and it revealed that each questionnaire would take about 20 minutes for filling. Nurses' manager included in the pilot study was excluded from study sample.

3.3) Data Collection

The researcher met with each subject in the study to explain the purpose of the study and to ask for participation. After obtaining verbal consent, the study tool handles to participated nurse manager to be filled. The data collection was done through structured interview with participants to fill the forms. This took about twenty minutes for each participant interview. The whole duration for data collection took about three months from February to April 2008.

4.) Statistical Analysis

Data entry and analysis were done using SPSS version 12 (Statistical Package for Social Science). Data were presented using descriptive statistics in the form of frequencies and percentages, mean, standard deviation, range and chi-square. For multiple group comparisons of quantitative data, one-way analysis of variance test (ANOVA) was used. Statistical significance was considered at p -value ≤ 0.05 .

3. Results:

Table 1 shows that, half (50.0%) of the studied nurses managers are working in general and special units and 23.3% in the intensive care units. About two thirds of them are less than 30 years old (64.7%), more than half were married (62.1%). The majority of them had bachelor of nursing sciences (94.8%) the minority were having master degree (5.2%), more than three quarters (84.5%) are head nurses. As regard years of experience (44.0 %, 38.7%, and 30.0%) of nurses in main, pediatric and women health hospitals respectively had five to less than ten years of experience. On the other hand more

than half of the studied nurses (58.1%) in Main, Pediatric, and Women Health Hospitals respectively have less than five years experience in nursing administration.

Table 2 reveals that, more than one third of nurses' managers used competencies very often for items of supporting patient's coping strategies, planning patient care according to individual needs, decision making guided by ethical values, Modifying the care plan according to individual need, and developing the treatment culture of their unit(44.9%, 41.4%,40.5%38.8%,37.1%) respectively.

Table 3 reveals that, all items of teaching coaching category were low in percentage, except developing orientation programs for new nurses in her unit, and coaching others in duties within her responsibility area (56.0%, 50.0%).

Table 4 shows that, more than one third of the studied nurses' managers using items of coaching other staff member in patient observation skills, coaching other staff member in use of diagnostic equipment, and developing documentation of patient care(47.4%,44.8%,43% respectively) with a score used very often. While more than one third of the nurses' managers in the study using item of Able to identify family member's need for emotional support (35.4%) with a score used of very seldom.

Table 5 illustrates that, 59.5%, 60.3% of studied nurses' managers used very often items of acting appropriately in life threatening situations, and keeping nursing care equipment in good condition respectively. While the lowest percentage of them using item of promoting flexible team cooperation in rapidly changing situations (5.2%) either not applicable or very seldom for both.

Table 6 depicts that, more than one third of studied nurses' managers used very often for all items of therapeutic interventions except items of utilizing research finding in nursing interventions, and evaluating systematically patient care outcomes (16.4%, 26.7%). Also, one third of the nurses' managers in the study used occasionally all items of therapeutic interventions. While the low percentage of nurse's manager not applicable for items of coordinating multidisciplinary team's nursing activities (3.4%).

Table 7 reveals that, more than one third of studied nurses' managers used occasionally for all items except items of able to identify areas in patient care needing further development and research, and evaluating critically unit's care philosophy half of them used occasionally(50,8%,51.7%).

Table 8 shows that, the highest percent of studied nurses' used very often for items of mentoring novices and advanced beginner, aware

of the limits of their own resources, and familiar with their organization's policy concerning division of labor and coordination of duties (63.8%,58.6%,56.9%) respectively. While the low percent for both items of taking care of themselves in terms of not depleting their mental and physical resources, and utilizing information technology in their work (20.7%).

Table 9 shows that mean scores of competence categories of the nurses' managers. The nurses' managers in main Assuit University Hospital are most competent than other two hospitals in all competence categories (13.74±4.40; 29.72±10.18; 13.73±4.81; 17.85±5.04; 21.21±5.73; 10.53±4.28; 43.42±8.77). And there were statistically significant differences among Assuit University Hospitals as regarded to work role category at p value ($P \leq 0.018$).

Table 10 provides data on the studied nurses' managers' level of competence. The level of competence categories in emergency is highest than all other work environment (66.96, 65.75, 72.32, 78.38, 74.99, 65.27, 80.15). The total VAS mean levels of competence of all categories ranged from 55.93 to 73.50.

Table 11 reveals that, the studied nurses' manager of main Assuit University Hospital have excellent level of competence than other two hospitals in all competence categories, helping role; teaching coaching; diagnostic functions; managing situations therapeutic interventions; ensuring quality; and work role (69.3%, 56.%, 68.%, 80.%, 76.%, 57.3% and 89.3%), and there were statistically significant differences among three university hospitals as regarded to categories of managing situations and work role at p value ($P \leq 0.033; 0.020$).

Table (1): Personal characteristics of the nurses' managers at Assuit University Hospitals (n=116)

Personal characteristics	Main Hospital (n=75)		Pediatric Health Hospital (n=31)		Women Health Hospital (n=10)		Total (n=116)	
	No.	%	No.	%	No.	%	No.	%
Department:								
Emergency units	10	13.3	6	19.4	0	0.0	16	13.8
ICUs	18	24.0	8	25.8	1	10.0	27	23.3
Operating rooms	9	12.0	2	6.5	4	40.0	15	12.9
General and special units	38	50.7	15	48.4	5	50.0	58	50.0
Age: (years)								
< 30	47	62.7	21	67.7	7	70.0	75	64.7
≥ 30	28	37.3	10	32.3	3	30.0	41	35.3
Mean ± SD	29.4±4.9		29.2±5.8		29.4±6.1		29.37 ± 5.27	
Range	23- 46		23 - 45		23 - 42		23 - 46	
Marital status:								
Single	28	37.3	11	35.5	5	50.0	44	37.9
Married	47	62.7	20	64.5	5	50.0	72	62.1
Education:								
Bachelor	70	93.3	30	66.8	10	100.0	110	94.8
Master	5	6.7	1	3.2	0	0.0	6	5.2
Occupation (management positions):								
Head nurse	65	86.7	24	77.4	9	90.0	98	84.5
Supervisor	7	9.3	6	19.4	0	0.0	13	11.2
Assistant director	2	2.7	0	0.0	0	0.0	2	1.7
Director	1	1.3	1	3.2	1	10.0	3	2.6
Years of experience:								
< 5	20	26.7	13	41.9	4	40.0	37	31.9
5 -	33	44.0	12	38.7	3	30.0	48	41.4
10 or more	22	29.3	6	19.4	3	30.0	31	26.7
Mean ± SD	7.0±4.2		6.5±4.6		7.5±5.5		6.97 ± 4.46	
Range	2 - 16		2- 19		2 - 20		1 - 20	
Administrative position experience:								
< 5 years	21	28.0	14	49.0	6	60.0	41	58.1
5 - years	34	45.3	5	13.0	1	10.0	39	27.4
10 years or more	20	26.7	12	38.0	3	30.0	36	14.5
Mean ± SD	5.7±4.2		3.3±2.6		4.1±4.9		5.11 ± 4.15	
Range	1 -17		1- 8		1- 15		1 - 17	

Table (2): Distribution of helping role category among the studied nurses' managers at Assuit University Hospitals (n=116).

Items of Helping role category	Not applicable		Used very seldom		Used occasionally		Used very often	
	No.	%	No.	%	No.	%	No.	%
1- Planning patient care according to individual needs	12	10.3	9	7.8	47	40.5	48	41.4
2- Supporting patient's coping strategies	8	6.9	12	10.3	44	37.9	52	44.9
3- Evaluating critically own philosophy in nursing	26	22.4	23	19.8	45	38.8	22	19.0
4- Modifying the care plan according to individual need	13	11.2	18	15.5	40	34.5	45	38.8
5- Utilizing nursing research finding in relationships with patients	28	24.1	29	25.0	35	30.2	24	20.7
6- Developing the treatment culture of unit	14	12.1	15	12.9	44	37.9	43	37.1
7- Decision making guided by ethical values	8	6.9	16	13.8	45	38.8	47	40.5

Table (3): Distribution of teaching-coaching category among the studied nurses' managers at Assuit University Hospitals (n=116)

Items of teaching coaching category	Not applicable		Used very seldom		Used occasionally		Used very often	
	No.	%	No.	%	No.	%	No.	%
1- Mapping out patient education needs carefully	15	12.9	13	11.2	48	41.4	40	34.5
2- Finding optimal timing for patient education	18	15.5	22	19.0	39	33.6	37	31.9
3- Mastering the content of patient education	19	16.4	25	21.6	41	35.3	31	26.7
4- Providing the individualized patient education	17	14.7	31	26.7	35	30.2	33	28.4
5- Coordinating patient education	24	20.7	27	23.3	41	35.3	24	20.7
6- Able to recognize family members' needs for guidance	31	26.7	35	30.2	33	28.4	17	14.7
7- Acting autonomously in guiding family members	22	19.4	39	33.6	36	31.0	19	16.0
8- Taking student nurse's level of skill acquisition into account in mentoring	16	13.8	29	25.0	40	34.5	31	26.7
9- Supporting student nurses in attaining goals	11	9.8	16	13.8	52	44.8	37	31.6
10- Evaluating patient education outcome together with patient	12	10.3	29	25.0	51	44.0	24	20.7
11- Evaluating patient education outcome together with family	26	22.4	26	22.4	42	36.2	22	19.0
12- Evaluating patient education outcome together with care team	7	6.0	25	21.6	57	49.1	27	23.3
13- Taking active step to maintain and improve profession skills	1	0.8	19	16.4	48	41.4	48	41.4
14- Developing patient education in unit	31	26.7	34	29.3	36	31.1	15	12.9
15- Developing orientation programs for new nurses in her unit	3	2.6	16	13.8	32	27.6	65	56.0
16- Coaching others in duties within responsibility area	4	3.4	14	16.1	40	30.5	58	50.0

Table (4): Distribution of diagnostic functions category among the studied nurses' managers at Assuit University Hospitals (n=116)

Items of Diagnostic Functions category	Not applicable		Used very seldom		Used occasionally		Used very often	
	No.	%	No.	%	No.	%	No.	%
1- Analyzing patient well-being from many perspective	12	10.3	24	20.7	42	36.2	38	32.8
2- Able to identify patient's need for emotional support	17	14.6	29	25.0	40	34.5	30	25.9
3- Able to identify family member's need for emotional support	26	22.4	41	35.4	37	31.9	12	10.3
4- Arranging expert help for patient when needed	7	6.1	20	17.2	45	38.8	44	37.9
5- Coaching other staff member in patient observation skills	4	3.4	21	18.1	36	31.1	55	47.4
6- Coaching other staff member in use of diagnostic equipment	7	6.1	24	20.7	33	28.4	52	44.8
7-Developing documentation of patient care	9	7.8	17	14.7	40	34.5	50	43.0

Table (5): Distribution of managing situations category among the studied nurses' managers at Assuit University Hospitals (n=116)

Managing Situations category	Not applicable		Used very seldom		Used occasionally		Used very often	
	No.	%	No.	%	No.	%	No.	%
1- Able to recognize situations posing a threat to life early	6	5.2	22	19.0	34	29.3	54	46.5
2- Prioritizing her activities flexibly according to changing situations	9	7.8	20	17.2	41	35.3	26	39.7
3- Acting appropriately in life threatening situations	4	3.4	14	12.1	29	25.0	69	59.5
4- Arranging debriefing session for the care team when needed	13	11.2	15	12.9	48	41.4	40	34.5
5- Coaching other team member in mastering rapidly changing situations	9	7.8	19	16.5	50	43.1	38	32.7
6- Planning care consistently with recourses available	5	4.3	19	16.2	43	37.3	49	42.2
7- Keeping nursing care equipment in good condition	6	5.1	7	6.2	33	28.4	70	60.3
8- Promoting flexible team cooperation in rapidly changing situations	6	5.2	6	5.2	51	44.0	53	45.6

Table (6): Distribution of therapeutic interventions category among the studied nurses' managers at Assuit University Hospitals (n=116)

Therapeutic Interventions	Not applicable		Used very seldom		Used occasionally		Used very often	
	No.	%	No.	%	No.	%	No.	%
1- Planning own activities flexibly according to clinical situation	14	12.1	8	6.9	55	47.4	39	33.6
2- Making decisions concerning patient care taking the particular situation in account	14	12.1	16	13.8	42	36.2	44	37.9
3- Coordinating multidisciplinary team's nursing activities	4	3.4	15	12.9	46	39.7	51	44.0
4- Coaching the care team in performance of nursing intervention	7	6.0	14	12.1	50	43.1	45	38.8
5- Updating written guidelines for care	14	12.0	15	12.9	46	39.7	41	35.4
6- Providing consultation for the care team	7	6.1	12	10.3	40	34.5	57	49.1
7- Utilizing research finding in nursing interventions	25	21.6	23	19.8	49	42.2	19	16.4
8-Evaluating systematically patient care outcomes	9	7.8	28	24.1	48	41.4	31	26.7
9- Incorporating relevant knowledge to provide optimal care	10	8.6	14	12.1	42	36.2	50	43.1
10- Contributing to further development of multidisciplinary clinical paths	10	8.6	21	18.1	38	32.8	47	40.5

Table (7): distribution of ensuring quality category among the studied nurses' managers at Assuit University Hospitals (n=116)

Ensuring Quality category	Not applicable		Used very seldom		Used occasionally		Used very often	
	No.	%	No.	%	No.	%	No.	%
1- Committed to her organization's care philosophy	19	16.4	19	16.4	42	36.2	36	31.0
2- Able to identify areas in patient care needing further development and research	14	12.1	21	18.1	59	50.8	22	19.0
3- Evaluating critically unit's care philosophy	20	17.2	22	19.0	60	51.7	14	12.1
4-Evaluating systematically patient's satisfaction with care	10	8.6	23	19.8	51	44.0	32	27.6
5- Utilizing research findings in further development of patient care	22	19.0	29	25.0	44	37.9	21	18.1
6- Making proposals concerning further development and research	21	18.1	34	29.3	50	43.1	11	9.5

Table (8): Distribution of work role category among the studied nurses' managers at Assuit University Hospitals (n=116)

Work Role category	Not applicable		Used very seldom		Used occasionally		Used very often	
	No.	%	No.	%	No.	%	No.	%
1- Able to recognize college's need for support and help	3	2.6	9	7.8	44	37.9	60	51.7
2- Aware of the limits of my own resources	3	2.6	13	11.2	32	27.6	68	58.6
3- Professional identity service as resource in nursing	4	3.4	16	13.8	55	47.4	41	35.4
4- Acting responsibly in term of limited financial resources	4	3.4	13	11.2	49	42.2	50	43.2
5- Familiar with organization's policy concerning division of labor and coordination of duties	3	2.6	13	11.2	34	29.3	66	56.9
6- Coordinating student nurse mentoring in the unit	7	6.0	19	16.4	42	36.2	48	41.4
7- Mentoring novices and advanced beginner	3	2.6	10	8.6	29	25.0	74	63.8
8- Providing expertise for the care team	6	5.2	12	10.3	49	42.2	49	42.3
9- Acting autonomously	9	7.8	14	12.1	50	43.1	43	37.0
10- Guiding staff member to duties corresponding to their skill levels	3	2.6	12	10.3	42	36.2	59	50.9
11-Incorporating new knowledge to optimize patient care	4	3.4	14	12.1	35	30.2	63	54.3
12- Ensuring sooth flow of care in the unit by delegating tasks	4	3.4	11	9.5	47	40.5	54	46.6
13- Taking care of myself in terms of not depleting my mental and physical resources	22	19.0	27	23.2	43	37.1	24	20.7
14- Utilizing information technology in work	18	15.5	38	32.8	36	31.0	24	20.7
15- Coordinating patient's overall care	2	1.7	13	11.2	47	40.5	54	46.6
16- Orchestrating the whole situation when needed	3	2.6	8	6.9	42	36.2	63	54.3
17- Giving feedback to colleges in a constructive way	19	16.4	16	13.8	43	37.1	38	32.7
18- Developing patient care in multidisciplinary team	6	5.2	14	12.1	49	42.2	47	40.5
19- Developing work environment	3	2.6	10	8.6	42	36.2	61	52.6

Table (9): Mean scores of competence categories among the studied nurses' managers in different Assuit

University Hospitals (n=116)

Competence categories	Main Hospital	Pediatric Hospital	Women Health Hospital	F. Value	P. value
	Mean ± SD	Mean ± SD	Mean ± SD		
1. Helping Role	13.74±4.40	13.32±4.32	12.10±5.52	0.624	0.537
2. Teaching Coaching	29.72±10.18	26.90±9.50	26.30±8.84	1.201	0.305
3. Diagnostic Functions	13.73±4.81	13.25±5.03	12.40±3.37	0.394	0.675
4. Managing Situations	17.85±5.04	17.45±4.53	15.70±6.70	0.805	0.449
5. Therapeutic Interventions	21.21±5.73	18.87±8.40	17.40±5.64	2.450	0.091
6. Ensuring Quality	10.53±4.28	9.41±4.02	8.60±3.71	1.459	0.37
7. Work Role	43.42±8.77	40.41±10.19	35.00±9.92	4.181	0.018*

*(P≤0.05)

Table (10): Total VAS (Visual Analogue Scale) means scores of competence categories in different work environments at Assuit University Hospitals (n=116)

Competence categories	VAS mean level of competence				Total Mean
	Special and general units	Emergency units	Intensive care units	Operating rooms	
1. Helping Role	64.28	66.96	63.31	62.85	64.24
2. Teaching Coaching	58.80	65.75	58.02	60.00	59.73
3. Diagnostic Functions	62.88	72.32	61.02	66.66	64.24
4. Managing Situations	71.04	78.38	73.61	75.00	73.16
5. Therapeutic Interventions	64.31	74.99	69.25	68.88	67.52
6. Ensuring Quality	51.82	65.27	57.40	59.25	55.93
7. Work Role	71.47	80.15	72.18	76.70	73.50

Table (11): Distribution of competence levels of each competence category among the studied nurses' managers at Assuit University Hospitals (n=116)

Competence categories	Main Hospital (n=75)		Pediatric Hospital (n= 31)		Women Health Hospital (n= 10)		p-value
	No	%	No	%	No	%	
1. Helping role:							0.329
• Mild	6	8.0	4	12.9	2	20.0	
• Good	17	22.7	10	32.3	4	40.0	
• Excellent	52	69.3	17	54.8	4	40.0	
2. Teaching coaching:							0.962
• Mild	7	9.3	3	9.7	1	10.0	
• Good	26	34.7	13	41.9	4	40.0	
• Excellent	42	56.0	15	48.4	5	50.0	
3. Diagnostic functions:							0.604
• Mild	6	8.0	2	6.5	0	0.0	
• Good	18	24.0	11	35.5	4	40.0	
• Excellent	51	68.0	18	58.0	6	60.0	
4. Managing situations:							0.033*
• Mild	3	4.0	0	0.0	2	20.0	
• Good	12	16.0	9	29.0	3	30.0	
• Excellent	60	80.0	22	71.0	5	50.0	
5. Therapeutic interventions:							0.061
• Mild	7	9.3	5	16.1	0	0.0	
• Good	11	14.7	6	19.4	5	50.0	
• Excellent	57	76.0	20	64.5	5	50.0	
6. Ensuring quality:							0.395
• Mild	14	18.7	5	16.2	2	20.0	
• Good	18	24.0	13	41.9	4	40.0	
• Excellent	43	57.3	13	41.9	4	40.0	
7. Work role:							0.020*
• Mild	1	1.3	0	0.0	0	0.0	
• Good	7	9.4	10	32.3	4	40.0	
• Excellent	67	89.3	21	67.7	6	60.0	

*(P≤0.05)

4. Discussion

The nurse manager is accountable for excellence in the clinical practice of nursing and the delivery of patient care on a selected unit within the health institution. This function is the primary focus of the nurse manager to meet this responsibility. The nurse manager has the authority to plan and implement strategies and programs consistent with the organization policies, goals, and objectives, as well as with professional standard. The manager is responsible for safe and caring environment that promote health teaching. The manager is responsible for assessing patient and family response to nursing care as well as evaluating the effectiveness and quality of care and services (Sullivan & Decker, 2005).

The present study confirms that regarding departments exactly half of study subjects who work in general and special units in different hospitals in the study while less than one quarter of them working in the intensive care units in the same hospitals. Regarding age, about two thirds of nurses' managers were less than thirty years old; more than one third of them have experience from five to less than ten years. Accordingly they have short years of experience (table, 1). These results is might be attributed to nurses' managers were from Pediatric and Women Health Hospital and these hospitals are new. This means that they will be in the work force for long years. To perform competently, personal characteristics are contributing factors to their development that have to be continuously identified and fulfilled.

More than half of nurses' managers are married; the majority of them had bachelor sciences of nursing, and more than three quarters of them head nurses. Defloor et al., (2006) clarify that the continuous presence of nurses' managers with experience and additional education will be necessary, particularly in emergency situations and they should be available for consultation

These results are in accordance with (McCloskey and McCain, 1988) who mentioned that the degree of education nurses had received best distinguished top and medium performers from poor performers during the first year of work. The level of experience was the best predictor of critical care skills. The top performers had also more feedback from supervisors than the poor performers. The results of their study also indicated that education, job satisfaction and feedback are determinants of job performance. In addition, they view the importance of manager leadership skills, manager expectations and communications with nurses are important for effective performance.

In the present study from competence categories (individual competencies), the nurses'

managers considered most competent in developing orientation program for new nurses in their units, coaching other staff member in patient observation skills. These may be attributed to implementation of an orientation program to all new graduated is an old rule for head nurses and staff nurses in Assuit University Hospital. The role of nurses' managers to coach staff nurses as a job description for them and nurses' managers considered least competent in developing patient education in their units. Moreover, decisions taken in particular situation and in providing ethical and individualized care (tables, 2, 3). This result is consistent with Bartlett et al., and Scholes et al., (2000) who mentioned that the importance of combining ethics and values, reflective practice, context-specific knowledge and skills are elements of competent performance.

Also, nurses' managers are considered most competent in keeping nursing care equipment in good condition. This indicates the presence of internal commitment and feeling of responsibility toward their units accordingly to their organization and least competence in coaching team members in mastering rapidly changing situations (tables, 5).

Least competent nurses were in evaluating patient education outcomes, utilizing research findings and contributing to further development of patient care (tables, 2, 6, 7, 8). This may be attributed to lack of integration and collaboration between nursing service and nursing education in the form of no research findings and recommendations applied in the hospital and also nurses' managers did not try to know what are new researches results are and they never read after graduate. Low competence in research utilization is verified by O'Conner et al., (2000) who clarify that nurses in general medical and surgical wards not utilize research finding in clinical practice while differ from the findings of Mccaughan and Parahoo, (2001) who mentioned that, more than half percent of medical and surgical nurses utilize research in clinical practice.

In Assuit University Hospitals nurse's managers considered that they were most competent as regard to work role category and there are a statistically significant differences between three hospitals regarding this category, followed by teaching-coaching category in the same Hospitals (table, 9). This may be attributed to that, Assuit University Hospitals considered a teaching based hospitals and the hospital have a training center, and every nursing staff members had a clear work role in order to be a role model in the work environment. As emphasized by (Meretoja and Leino-Kilpi, 2003) in their study of competence assessment made by nurse managers and practicing nurses, in which nurses'

managers assessed nurses more competent in teaching coaching category.

Assessment levels of competence as regard to competence categories in different work environments. The finding of the present study revealed that, the nurses' managers level of competences considered as excellent. The total VAS mean levels of competence of all categories ranged from 56 to 73. The nurses' managers considered that they were most competent in skills and tasks falling into the categories of managing situations, helping role and diagnostic functions (table, 10). This result is consistent with Meretoja, (2002) who clarifies that, the university hospital setting were high patient acuity and short length of stay that reflect great complexity, high risk patients and the need of rapid nursing responses to patient care.

The findings of the present study show that, nurses' managers related their own competence as excellent in three Assuit University Hospitals and there were statistically significant differences among the three hospitals as regarding to work role and managing situation categories (table, 11). It might be attributed to that, the main Assuit University Hospital is the oldest hospital and nurse managers are more experienced and received more training programs in clinical service than those of pediatric and women hospitals, in which they are new developed and less experienced employees. This result is inconsistent with Harisson and Nixon (2002) who mentioned that, the organizational culture, and the environment of care or resources available may have an effect on how nurses define the purpose of nursing and prioritize nursing actions.

Conclusions

In the light of the study results, the following conclusions can be drawn:

- 1- Nurses' managers have excellent level of competence in work role category, followed by teaching coaching category, then in managing situation category.
- 2- Main Assuit University Hospital nurses' managers are competent than Pediatric Hospital and Women Health Hospitals in all competence categories.
- 3- The emergency units nurses' managers are competent than other different work settings following by operating rooms.

Recommendations

Based on the forgoing conclusions, the following recommendations are proposed:-

- 1- Developing a career ladder for different nursing categories to encourage nurses' managers to improve their level of competency.

- 2- Developing a Performance appraisal tool specific for nursing categories to recognize and promote them based on career ladder.
- 3- Continuing education (in the form of workshops or training courses) to nurses' managers regarding developing patient education and how to deal with rapidly changing situations.
- 4- More researches are needed to evaluate the outcomes of competencies not only in terms of individual nurses but also in terms of patient and unit outcomes.

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