Quality Assurance of Nursing Performance in Surgical Wards

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Abstract

Objective: The study deafs with nursing performance in the surgical wards in general hospital at Baghdad city.

Methodology : A descriptive evaluation design using, observational method was carried out. Non probability (purposive) sample of (151) nurses was selected for the study and comprised all nurses who worked in general surgical wards in the four health sectors(Rusaffa , Al-Karkh, Al-Yarmok, Medical city health sector) at time of collecting the data. A check list questionnaire was constructed by the researcher for the purpose of the study; it is composed of (2) major parts, part (I) is concerned with socio-demographic data and the second part is composed of two minor parts thev concerned with availability of equipment and nursing performance. Validity of the questionnaire was determined through panel of experts. Reliability of the questionnaire was determined through computation correlation coefficient of (93.3) was statistically acceptable. The data were analyzed through the application of the descriptive data analysis approach and the inferential statistics. **Results** : The findings of the study indicated that more than half of the sample (66.2%) was male, the majority of the sample (71.52%) were in group (25-30) year. Most of the sample (29.8%) was training course graduates. The higher percentage (58.3%) has no training session after ward.

Findings of the study had pointed that there were severe shortages in availability of equipment related to patients admission procedure, preoperative and postoperative nursing care procedures. The results also revealed that the nurses performance were inadequate related to some nursing procedures such as admission procedure, preoperative nursing care procedure and postoperative nursing procedure. The findings of the study has approved that there was significant relationship between nursing performance and demographic variables, Such as gender, age, level of education, training session.

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Recommendation : The study recommended that emphasis should be directed toward developing strategy to ensure adequate supplies and equipment, continuous nursing education and training program should be arranged for correct nursing performance.

Quality assurance programme should be provided in every health agency and especially in surgical wards, and employment of college or institution graduate nurses in surgical ward should be planned. Key wards : Quality assurance ,nursing performance ,surgical procedure.

Introduction

Health care today still have major quality problems that need to be improved, these problems fall into five categories; there is unnecessary and inappropriate care given; there is excessive variation in the care delivered; there is fragmentation and poor coordination of care delivery; and there are insufficient processes of care delivery. These are systematic problems and for the most part, they are caused by nurses or other providers, but nurses often bear the brunt.⁽¹⁵⁾

Measuring performance is impossible if standards have not been clearly established not only standards must exist, but the leader must see that all subordinates know and understand them. Because standards vary between institution, employees must know the standard expected of them at their organization.⁽⁵⁾

The employees must aware that their performance will be measured in terms of their ability to meet the established standard, therefore the hospital nurses should provide pre and post operative patient care that meet standards specific to their institution⁽⁷⁾, As well as have been noted that there performance requires careful examination of all aspects of health care , and conduct its own performance evaluations rate of the care provided by facility itself together these evaluative efforts are called quality assurance⁽⁶⁾.

Quality assurance for health care is often taken to be an innovation of the twentieth century. Now government, professionals and patients are in broad agreement that quality assurance for health care is essential.⁽¹⁰⁾

Quality assurance tended to focus on the evaluative portion of the performance of individual staff members. Therefore, it could easily create a punitive impression about nursing care that provided by nursing staff, also it has focused on clinical practice providing information on the appropriateness of nursing performance and activities.⁽¹⁴⁾

The aims of present study were to determine the nursing performance regarding some nursing procedures in general surgical wards, to identify availability of equipment related to some nursing procedures in surgical war and to find out the relationship between nursing performance with demographic data.

Methodology

A descriptive evaluation design using, observational method was carried out which deals with nursing performance in surgical wards in the period from September 2002 to March 2003. The study was conducted at the general surgical wards of many general hospitals, in Baghdad 1- Al-Rusaffa health sector which include (Al-Thowra, Al-Kadessia, Al-Noman general hospital, Al-Za'afarania hospital, Al-Madan hospital) 2-Al-Karkh health sector which include (Al-Karama teaching hospital, Al-Mohmodia general hospital Al-Noor general hospital) 3-Al-Yarmok health sector which include(Al-Yarmok teaching hospital , Al-Kindi teaching hospital, Al-Kadhymia teaching hospital) 4- Medical city health sector which include (Baghdad teaching hospital)

Each hospital in these sectors has 1-3 general surgical wards. The capacity in the ward is shown from 28 - 56 beds and occupancy rate ranging between 10-50 beds.

The population consists of all *nurses who are working in general* surgical wards of these governmental hospitals of Baghdad city. Non probability (purposive) sample of (151) nurses was selected for the study and comprised of all nurses who worked in the general surgical wards in the formationed health sectors at time of collecting the data.

A checklist questionnaire was constructed by the researcher for the purpose of the present study. The instrument development was based on a comprehensive review of relevant literatures.

Content validity of the check list questionnaire was determined through a panel of experts. To obtain the reliability of the check list questionnaire, the researcher with two colleagues had observed (20) nurse during their routine daily performance to the patients, the observation was carried out at Baghdad teaching hospital, to ensure that the items of the check list questionnaire are clear, simple, and understandable. The correlation coefficient for the nursing performance check list was (r=0.90) (r=0.96)(r=0.94). The final draft of the present study was developed to include the following. Part I: Socio - demographic data sheet

Part II: Check list questionnaire, The check list questionnaire is composed of two major parts :

A. Availability of equipment

B. Nursing performance Which include the following procedures: 1- Admission procedure, 2- Pre-operative nursing care, 3- Pre-operative teaching, 4- The night before surgery, 5- The day of surgery, 6-Post operative nursing care and 7-Recording

Each items in the second part of observational check list related to nursing performance was measured, score rated on (3) levels type like scale (perfectly, less perfectness, never perform or (3) for perfectly. (2) less perfectness (1) never perform except performance toward chart recrding was measured and scored by (yes, no). For measurement purpose, a cumulative scores were obtained and presented as'perfectly perform (214-321), less perfect (107 - 213), and (less than 107) never performance.

A mean of score equal to (2.0-2.3) was considered perfectly performance, (1.1-1.9) was considered less perfect performance, (1) was considered not perform practice.

The data were collected through the application of concealed observation technique, and after that the investigator interviewing the nurses to collect the data regarding to demographic data. Such data collections were performed through the period of September 2002 to March 2003.

The nurses were observed, while they were performing their surgical procedure during three shifts from morning till midnight.

Results

Table (1) Distribution the nurses socio-demographic characteristics

| | Variables | F. | % |
|----|--|-----|-------|
| 1. | Gender | | |
| | Male | 100 | 66.2 |
| | Female | 51 | 33.8 |
| | Total | 151 | 100.0 |
| 2. | Age | | |
| | 25-30 | 108 | 71.52 |
| | 31-35 | 21 | 13.90 |
| | 36-40 | 22 | 14.56 |
| | Total | 151 | 100.0 |
| 3 | Marital status | | |
| | Married | 75 | 49.7 |
| | Single | 76 | 50.3 |
| | Total | 151 | 100.0 |
| 4. | Education level | | |
| | 1. Training course graduate | 45 | 29.8 |
| | 2. Primary nursing school graduate | 38 | 25.2 |
| | 3. Secondary nursing school graduate | 28 | 18.5 |
| | 4. High nursing institute graduate | 40 | 26.5 |
| | Total | 151 | 100.0 |
| 5. | Number of employment years in surgical wards | | |
| | 1-5 years | 80 | 53.0 |
| | 6-10 years | 19 | 12.6 |
| | 11-15 year | 52 | 34.4 |
| | Total | 151 | 100.0 |
| 6. | Training session | F | % |
| | Yes | 63 | 41.7 |
| | No | 88 | 58.3 |
| | Total | 151 | 100.0 |
| 7. | Nursing conference and symposium | | |
| | Yes | 0 | 0 |
| | No | 151 | 100.0 |
| 8. | Salaries and reward for the nurses monthly | | |
| | -Salaries 3.000 ID | 151 | 100.0 |
| | -Reward 10.000-20.000 ID | 151 | 100.0 |

Table (1) Continued

| 9. | Non nursing duties | F | % |
|----|-----------------------|-----|-------|
| | - Statistics services | 151 | 100.0 |
| | - Reception services | 151 | 100.0 |
| | - Cleaning services | 151 | 100.0 |
| | - Administration | 151 | 100.0 |

ID. Iraqi Dinar.

Table (1) indicates that more than half of the sample (66.2%) were male while (33.8%o) were female, with age (25-40) year, the majority of the sample (71.52%) were in the age range (25-30) year 50.3%o of nurses were single. Most of them (29.81%o) were training course graduates, these courses are usually after the primary school. The table presents also the duration of experience in surgical ward (53%) of the sample had period from 1 to 5 years and (34.4%) have period from (11-15) year.

Concerning the number of training session, the higher percentage (58.3%) have no training session while (41.7%) of sample have one training session.

Nursing conference and symposium was reported (100%) for no attended.Concerning salaries and reward for nurses monthly the table showed that the all nurses (100%) are under paid, all nurses (100%) share in non nursing duties such as statistic service, resption services, cleaning services and administration.

| Table (2) The frequencies | iencies and percentages of a | availability of equipment for |
|---------------------------|------------------------------|-------------------------------|
| procedures in surgical wa | rds | |

| procedure | | Items | Avai | ilable | Non-avail able | | |
|-----------------------|----|---------------------------|------|--------|-------------------|------|--|
| > | 1- | Hospital gem n | | - | 151 | 100 | |
| a 3 | 2- | Admission form for nurses | - | - | 151 | 100 | |
| | 5- | Nursing assessment form | - | - | 151 | 100 | |
| a 4- Thermometers | | 45 | 29.8 | 106 | 70.2 | | |
| "i 9 | 5- | Water pitcher | - | - | 151 | 100 | |
| | 6- | Cup | - | - | 151 | 100 | |
| | 7- | Bed pan | 37 | 24.5 | 114 | 75.5 | |
| | 8- | Emesis basin | 39 | 25.8 | 112 | 74.2 | |
| Pre nur equ | 1- | - Gloves | 59 | 39.1 | 92 | 60.9 | |
| sing | 2- | - Thermometers | 45 | 29.8 | 106 | 70.2 | |
| rative care ont | 3- | - Sphygmomonmeter | 67 | 44.4 | 84 | 55.6 | |
| | 4- | - Stethoscope | 53 | 35.1 | 98 | 64.9 | |
| | 5- | - Watch with second hand | 54 | 35.8 | . 97 | 64.2 | |

| | | 8 | | | | |
|--------------|-----|--------------------------------------|----|------|-----|-------|
| | 6- | - Weight scale | 30 | 19.8 | 121 | 80.13 |
| | 7- | - Hight scale | 0 | 0 | 151 | 100 |
| | 8- | - Patient chart | 54 | 35.8 | 97 | 64.2 |
| | 9- | - Graphic sheet | 52 | 34.4 | 99 | 65.6 |
| | 10- | - nurses note | 25 | 16.6 | 126 | 83.4 |
| | 11- | - chart intake and out put chart | | | 151 | 100 |
| equ | 1- | - Thermometers | 68 | 45.0 | 83 | 55.0 |
| stope | 2- | - Watch with second hand | 60 | 39.7 | 91 | 60.3 |
| rativ ent | 3- | - Stethoscope | 53 | 35.1 | 98 | 64.9 |
| e nur | 4- | - Sphygmonometer | 67 | 44.4 | 84 | 55.6 |
| sing | 5- | - Oxygen | 45 | 29.8 | 106 | 70.2 |
| care | 6- | - Emesis basin | 39 | 25.8 | 112 | 74.2 |
| | 7- | - Post operative observational chart | 15 | 9.9 | 136 | 90.1 |

Table (2) indicated that availability of equipment for admission procedure (100%) for items (1, 2, 3, 5, 6) were not provide, concerning equipment for preoperative nursing care were not available (100%) of the sample have no intake and out put chart, and hight scale.(83.4%) have no nurses note Regarding equipment for postoperative nursing care procedure was not adequate, (90.1%o) of the sample have no postoperative observation chart.

Table (3) The mean of scores , frequencies and percentages for admission procedure, preoperative nursing care procedure performance , preoperative teaching, care on the night before surgery, care on the day of the surgery and postoperative nursing care

| Nursing performance | | Perfectly 3 | | Less pe | erfect | Never | Mean | |
|---------------------|-------------------------------------|----------------|------|---------|--------|-------|------|-----|
| | | F | % | F | % | F | % | |
| 1 | Admission procedure | 9 | 5.9 | 11 | 7.3 | 131 | 90.7 | |
| 2 | Preoperative nursing care procedure | 12 | 7.9 | 17 | 11.3 | 122 | 80.8 | - 1 |
| 3 | Preoperative teaching | 0 | 0 | 0 | 0 | 151 | 100 | |
| 4 | On the night before surgery | 5 | 3.3 | 10 | 6.6 | 136 | 90.1 | |
| 5 | On the day of surgery | 5 | 3.3 | 18 | 11.9 | 128 | 84.8 | |
| 6 | Postoperative nursing care | 22 | 14.6 | 27 | 17.9 | 102 | 67.5 | 1 |

Table (3) showed that the mean score for nursing performance of admissio: procedure, preoperative nursing care, nrsing care on the night before surgery, ano

nursing performance toward postoperative nursing care were less perfect performance.

Table (4) Frequencies and percentages of nurse performance toward chart recording

| Recorded Items | Ŋ | No | | |
|---|---|----------------|-----|-----|
| Recorded items | | 0/ 0/ /o /o | | |
| Time arrival of the patient to the ward | | 0 | 151 | 100 |
| Treatment and care for the patient | | | 15 | 100 |
| If there is any changes in patient status | | | 151 | 100 |

Table (9) revealed that the (100%) of sample doesn't recorded the arrival of the patients, treatment and care and any changes in patient status.

Table (5) Association between the nurses' performance and their Socio demographic data

| Socio | Perf | ectly | Less perfectance | | Nev | Never | | otal | X ² | |
|--------------------------------------|------|-------|---------------------|------|------|-------|-----|------|-----------------------------|--|
| -demographic data | | | | | perf | orm | | | | |
| | F | % | F | % | F | % | F | % | | |
| Age | | • | • | • | | • | 1 | | • | |
| 25-30 | 4 | 3.7 | 8 | 7.4 | 96 | 88.9 | 108 | 100 | $X^2 Obs =$ | |
| 31-35 | 5 | 23.9 | 4 | 19 | 12 | 52.1 | 21 | 100 | df=4 | |
| 36-40 | 1 | 4.5 | 2 | 9.1 | 19 | 86.4 | 22 | 100 | x cirt = 9.488 p | |
| Total | 10 | 6.6 | 14 | 9,3 | 127 | 84.1 | 151 | 100 | <0.05 | |
| Educational level | | | | | | | | | | |
| 1. Training course graduate | 2 | 4.4 | 2 | 4.4 | 41 | 91.1 | 45 | 100 | X2 Obs. = 6.87 df=6x cirt = | |
| 2. Primary nursing school graduate | 2 | 5.3 | 3 | 7.9 | 33 | 86.8 | 38 | 100 | 12.592 p < 0.05 | |
| 3. Secondary nursing school graduate | 2 | 7.1 | 4 | 14.3 | 22 | 78.6 | 28 | 100 | - | |
| 4. High Nursing institute | 4 | 10 | 5 | 12.5 | 31 | 77.5 | 40 | 100 | | |
| Total | 10 | 6.6 | 14 | 9.3 | 127 | 84.1 | 151 | 100 | | |

Table (5) Continued

| training session | | | | | | | | | | | |
|-------------------------------|-------|-------|----|------|-----|------|-----|-----|---|--|--|
| No training session | 4 | 4.5 | 7 | 8 | 77 | 87.5 | 88 | 100 | $X^{2} Obs = 0.91 df=2$ | | |
| One training session | 6 | 9.5 | 7 | 11.1 | 50 | 79.4 | 63 | 100 | x cirt = 5.991 p | | |
| Total | 10 | 6.6 | 14 | 9.3 | 127 | 84.1 | 151 | 100 | <0.05 | | |
| No of nurses in Surgical ward | | | | | | | | | | | |
| 5 | 4 | 3.1 | 7 | 5.4 | 119 | 91.5 | 130 | 100 | $\begin{array}{c} . X^2 \text{ Obs} \\ = 25.52 \end{array}$ | | |
| 6 | 6 | 28.6 | 7 | 33.3 | 8 | 38.1 | 21 | 100 | df=2 x cirt | | |
| Total | 10 | 6.6 | 14 | 9.3 | 127 | 84.1 | 151 | 100 | p<0.05 | | |
| employment years | l sur | gical | d | | | | | | | | |
| 1 - 5 years | 3 | 3.8 | | 3.8 | 74 | 92.5 | 80 | 100 | $\begin{array}{c} X^2 \text{ Obs.} = \\ 17.88 \end{array}$ | | |
| 6-10 years | 2 | 10.5 | 2 | 10.5 | 159 | 78.9 | 19 | 100 | df=4 x cirt | | |
| 11-15 years | 5 | 9.6 | 9 | 17.3 | 38 | 73.1 | 52 | 100 | -9.488 | | |
| Total | 10 | 6.6 | 14 | 9.3 | 127 | 84.1 | 151 | 100 | P <0.05 | | |

Table (5) tllus trates that ;re no sig nifica t ences | jetwe n nurse's performance and their level of education , training session. The table also indicated that there is significant association between nursing performance and their

employment years in surgical wards, age . the number of the nurses in the ward (p < 0.05)

Discussion

Part I: Nurses demographic characteristics

Gender: It had been noticed through the data analysis that the majority of the nurses were male (66.2%) table (1). Similar findings were reported by MOH⁽⁴⁾ which found that over (50%) of the nurses staff were male; In a survey in the United States⁽ showed that (91%) of nurses were women .

Age: The results revealed that the age of the sample ranged from (25-40) year and the majority (63%) were young nurses. While in a survey in the United States⁽⁶⁾ reported that the employment of nurses more than 35 dropped by 8 percent last year and the number of nurses age 35 to 49 long the balk of the workforce.

Marital status: The results showed that the (50.3%) were single and (47.7%) were married.

Educational level: Concerning the education level, results showed that the majority of the sample was from training course (29.8%), the lowest percentage was from secondary nursing school (18.5%) this result indicated that the majority were with low level of academic education.



Experience in surgical wards: The results showed that the highest percentage of the sample (53.0%) has (1-5) years of experience in surgical ward, also showd that (34.4%) of them have (11-15) years of experience in surgical ward. This result may have an impact on the nurse's performance in surgical wards due to lack of experience.

Training session: It had been noted through the data analysis that the majority of nurses (58.3%) did not attend any training session after their graduation and during all their employment years.

Salaries and reward for nurses: The results of the study showed that all nursing categories are underpaid in the previous salary scheme, qualification; the salary is considered a very important thing for motivation.

Previous study⁽⁹⁾ showed the effect of motivation such as reward of nurses, and the performance depend on the strength of their motives. Motives are sometimes defined as needs. The nursing salaries are most often dependent on the needs of a community, work load, schedule, training, expertise, and experience required⁽⁸⁾. This salary survey by Allied who provide the most recent surveys of health care salaries employment conditions, the average salary for the nurses in united states is between \$38,792 and \$44.869⁽²⁾.

Nursing conference and symposium: Regarding the activities of nursing staff. The results of the study showed that no participate of nursing staff in committee, conference, and symposium of nursing and this gives evidence that there were no up gradeing in their knowledge or skill.

This result agreed with the study conducted by All Doski⁽⁹⁾ which showed that the nursing staff did not participant in committees and conferences related to nursing, this give an evidence that there were not have any role to nursing staff in health care, by which this activity could affect their experience and performance. **Non nursing duties:** The result of the study showed that nursing staff spend a lot of time in non nursing duties such as statistics services, recpetion services, cleaning services and administration services.

Those nurses were far away from nursing activities and they didn't acquire nursing skills which definitely affected their performance. This result is similar to the result of the study conducted by All Doski⁽⁶⁾ which showed that most of the nursing staff duties were administrative **Part II: Availability of equipment in surgical wards**

It had been realized that there were a shortage of availability of equipment and supplies in most items regarding admission procedure (100%) non available for items, *hospital gown*, *admission form for nurses, nursing* assessment form, wafer pifcner, and cup. The result also indicated a shortage regarding preoperative nursing care, the high percentage of non availability of equipment for items chart intake and out put chart and hight scale (100%), nurses note (83.49%), and weight scale (80.13%).

Concerning postoperative nursing care equipment its aggared that there were shortages in availability of equipment, and supplies like. (90.1%) of nurses recoerd the shortages of postoperative observation chart, (74.2%) of nurses recoerd the shortage in emesis basin. In a meeting on performance improvement (PI) approach, inflection by Sagoe and et al^{(l} who discussed the infection prevention performance gap? And they indicated that inadequate supplies and equipment at all levels, in appropriateness of the supplies and equipment had deeply affected the nursing performance, and it discovered that most, managers and administrations were not informed or aware of the importance of performance improvement.

So the poor preparation of equipment in surgical wards due to sever shortages of equipments and other resources needed for nursing care make it difficult to provide a care of acceptable standard.

Part III: Nurses performance and its improvement

Admission into a hospital begins with ensuring that clients know what to expect during the hospital stay.

The results reflected that nursing performance in admission procedure is inadequate, the mean of score was (1.19) This results were inconsistent with report concluded that the measurement of vital signs of the patient provides data that be used to determine a clinicals' status of health as well as the response to physical , psychological, medical and nursing therapy/

An alteration from normal, may sign the need for medical or nursing intervention, therefore, the nurse must be able to measure vital signs correctly. understand and interpret the values

The results of present study indicated that the mean of score for pre-operative evaluation of patient were (1.27) table (4). This result is inconsistent with a result mentioned by Wong who emphasised on nursing assessment of the patient and appropriate physical test.

Relative to preoperative teaching also, inadequate performance was presented in all the items such as explain preoperative procedures to the patient, instruct the patient about exercise that he may be expected to perform after surgery (appendix 1). The nurses must provide patient and their families with preoperative explanation regarding the up coming surgical procedures, this includes information about the technique of surgery, discuses equipment that might be used postoperative, instruct the patient about exercise that might be needed after surgery⁽.

Concerning night and day before operative also mean of score (1.13), (1.18) indicated less perfact performance respectively.

Although the highest mean of score (1.47) was for postoperative nursing care. record less perfect performance of nurses. The importance of providing postoperative cares for patients recovering from anesthesia, and given postoperative education by the nurses⁽⁷⁾.

Part IV: Association between the nurse's performance and their some variables

Throughout the data analysis, the high percentage (88.6%) of the in efficient nurses were at age (20-30), this result indicated that the majority were young nurses which have a limited experience.

Scally ⁽⁾ stated that the average age increased by (1.6) years between 1998 and 2002, from 42.6 years to 44.2 years in 2002, there were more nurses in the Canadian workforce age 55 to 59 than age 25 to 29; with age the experience is improving.

Significant differences in this study were obtained by correlating educational level with nursing performance in surgical ward. The majority (29.8%) of nurses was not having academic qualification; consequently, this affected their performance.

The result of this study confirmed with the survey conducted by MOH, (2003) which reported that the most educated nurses (graduated from Bs program) have little inctination to continue in clinical practice and delivered high qualified performance, therefore, a positive collaboration should increase between nursing performance and nursing education where there is an intense need for high qualified nurses.

The data showed significant differences at p < 0.05 on relating performance with training sessions. The highest percentage (87.5%) with (Never) performance of nursing had no training session. This result combats with continuing education and in-service program which was conducted by a university continuing educational service employing institution or agencies, because such program assists the nurses in acquiring new knowledge and skill necessary for promoting nursing performance. Therefore, all nurses should have access to continuing education, in-service program, training session, nursing conference and symposium.

The result of the present study agreed with the shortage per nurses in the USA and showed that the number of nurses in surgical wards in Baghdad hospital was 5 nurses on duty for 24 hours in every ward serving (20-40) patients; this shortage had affected the nurses performance and delivered a poor care for patients.

There is a shortage of nurses throughout the world. According to a new study conducted by Canadian institute for health information (CIHI) Canada could lose as many as (29746) nurses by 2001 to retirement and death, equal to 13 percent of the 2001 nursing workforce, the (CIHI) study based its estimate of the number of nurses leaving the profession at a retirement age of 65. If Canadian nurses retire early at 55, the number of nurses leaving the profession would skyrocket to (64248), equal to 28 percent of nursing workforce in 2006. With similar conclusion in a study of nursing workforce in the United States, therefor the study called for the implementation of retention incentives as a mean to prevent the exodus of older nurses from the profession. A problem may arise if there are no enough nurses to provide a competent care for the increasing number of clients^{(J}.

In a study by Reece, $^{(12)}$ on the relationship between the number of nurses and the quality of their performance delivered to patient, he reported that an extra hour of nursing attention per surgical patient each day reduce the risk of uranary tract infection, by (10%) and of pneumonia by (8%) and the extra nursing care improved surgical out comes. Also he noted that more the (1.3) million nurses work in US hospital, but there is a shortage of about (125000), this number in expected to triple by 2008.

Recently a group of international experts met at WHO Head quarters in Geneva concluded that nursing services are in "crisis" and nurses around the globe are leaving the health system driven away by underpay, hazardous working conditions. In Iraq, nursing profession has different human resources most of them were outside nursing such as medical assistant, anesthestics assistant, pharmacology assistant and others. The majority were from outside nurses (55%) while the nursing profession about (10-12) thousand (MOH, 2004).

Recommendations

- 1. Continuous nursing performance education and training programs should be arranged for nurses to improve nursing performance.
- 2. Quality assurance programme should be provided in every health agency and especially in surgical wards.
- 3. Employment of college or institution graduate nurses in surgical wards should be planned.
- 4. A setting of nursing supervision tool should be established for periodic evaluation of nursing performance.
- 5. Emphasis should be directed toward developing strategy to ensure adequate supplies and equipment.

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Appendix (1) The mean of scores, frequencies and percentages for admission procedure performance

| P ₂ B | Admission procedure | Perf | ectly 3 | Less p 2 | erfect | Never p | Mean | |
|------------------|---|------|---------|-------------|--------|---------|------|------|
| | Items | F | % | F | % | F | % | |
| 1 | - Give a gowan to the patient | 0 | - | 0 | - | 151 | 100 | 1.0 |
| 2 | - Make the bed as the patients condition requires | 0 | - | 0 | - | 151 | 100 | 1.0 |
| 3 | - Fold down the top linens to receive new patient | 0 | - | 0 | - | 151 | 100 | 1.0 |
| 4 | - Adjust the lights in the room | 0 | - | 0 | - | 151 | 100 | 1.0 |
| 5 | - Adjust the temperature in the room | 0 | - | 0 | - | 151 | 100 | 1.0 |
| 6 | - Adjust ventilation in the room | 0 | - | 0 | - | 151 | 100 | 1.0 |
| 7 | - Greet the patient by his proper name | 45 | 29.8 | 0 | - | 106 | 70.2 | 1.59 |
| 8 | - Introduce herself and any staff present | 0 | - | 0 | - | 151 | 100 | 1.0 |
| 9 | - Compare the name and number on the patients identification bracelet with the patient form | 0 | - | 0 | - | ,51 | 100 | 1.0 |
| 10 | - Measure patient temperature | | - | 10 | 6.6 | 141 | 93.7 | 1.06 |
| 11 | Measure patient pulse | | | 5 | 3.3 | 146 | 96.6 | 1.03 |
| 12 | 0 Measure patient respiration | | - | 5 | 3.3 | 146 | 96.6 | 1.03 |
| 13 | Measure patient blood pressure | | - | 5 | 3.3 | 146 | 96.6 | 1.03 |
| 14 | Measure patient height | | - | - | - | 151 | 100 | 1.0 |
| 15 | Measure patient weight | | - | - | - | 151 | 100 | 1.0 |
| | Record the patient's: | | | | | | | |
| 16 | - Temperature | | | 5 | 3.3 | 146 | 96.6 | 1.03 |
| 17 | - Pulse | | | - | - | 151 | 100 | 1.0 |
| 18 | - Respiration | | | - | - | 151 | 100 | 1.0 |
| 19 | - Blood pressure | | | - | - | 151 | 100 | 1.0 |
| 20 | - Height | - | | - | - | 151 | 100 | 1.0 |
| 21 | - Weight | - | | - | - | 151 | 100 | 1.0 |
| 22 | - Take complete patients' history | - | - | - | - | 151 | 100 | 1.0 |
| 23 | - Collect specimens if ordered | 24 | 15.9 | 70 | 46.4 | 57 | 37.7 | 1.78 |
| 24 | - Inform patient of any tests that have been ordered | 21 | 13.9 | 62 | 41.1 | 68 | 45.0 | 1.68 |
| 25 | - Besure the patient is comfortable in his bed | 0 | - | 0 | - | 151 | 100 | 1.0 |
| 26 | - Besure the patient is safe in his bed. | 0 | - | 0 | - | 151 | 100 | 1.0 |
| 27 | - Instruct the patient how to use the equipment in his unit | 0 | - | 0 | - | 151 | 100 | 1.0 |
| 28 | - Explain the hospital routine | 0 | - | 0 | - | 151 | 100 | 1.0 |

| | | Performance | | | | | | | | | |
|------------------|--|-------------|------|------------|-------|-----------|------|------|--|--|--|
| P ₂ B | Preoperative nursing, care procedure | Perfectly 3 | | Less per 2 | rfect | Never per | form | M - | | | |
| | Items | F | % | F | % | F | % | | | | |
| 1 | Encourage patient to express his angry feeling | 38 | 25.1 | 76 | 50.3 | 37 | 24.5 | - | | | |
| 2 | Lison to the patient | 38 | 25.1 | 60 | 39.7 | 53 | 35.1 | L 1 | | | |
| | Physical preparation | | | | | | | | | | |
| 3 | Laboratory tests | 46 | 30.5 | 61 | 40.4 | 44 | 29.1 | ; | | | |
| 4 | Go with the patient to X-Ray department | 0 | - | 0 | - | 151 | 100 | | | | |
| 5 | E.C.G. | 0 | - | 20 | 13.2 | 131 | 86.8 | | | | |
| 6 | Patient consent | 21 | 13.9 | 61 | 40.4 | 69 | 43.1 | sU | | | |
| | Measure the patient | | | | | | | | | | |
| 7 | - Temperature | - | - | 10 | 6.6 | 141 | 93.4 | | | | |
| S | - Pulse | - | - | 10 | 66 | 141 | 93.4 | | | | |
| 9 | - Respiration | - | - | 10 | 6.6 | 141 | 93.4 | | | | |
| 10 | - Blood pressure | - | - | 10 | 6.6 | 141 | 93.4 | ft 1 | | | |
| 11 | - Height | - | - | - | - | 151 | 100 | • *1 | | | |
| 12 | - Weight | - | - | - | - | 151 | 100 | | | | |
| | Record patient's | | | | | | | | | | |
| 13 | - Temperature | - | - | - | - | 151 | 100 | | | | |
| 14 | - Pulse | - | - | - | - | 151 | 100 | | | | |
| 15 | - Respiration | - | - | - | - | 151 | 100 | | | | |
| 16 | - Blood pressure | - | - | - | - | 151 | 100 | | | | |
| 17 | - Height | - | - | - | - | 151 | 100 | | | | |
| 18 | - Weight | - | - | | " | 151 | 100 | | | | |

The mean of scores, frequencies and percentages for preoperative nursing care procedure performance

The mean of scores , frequencies and percentages for nurses performance toward the preoperative teaching

| | | Performance | | | | | | | | | | |
|-------------|---|----------------|---|--------------|--------|----------|-----|--|--|--|--|--|
| | Preoperative teaching | Perfectly 3 | | Less pe 2 | erfect | Never pe | M - | | | | | |
| | Items | F | % | F | % | F | % | | | | | |
| 1 | Explain preoperative procedures to the patient | - | - | - | - | 151 | 100 | | | | | |
| | Discuss equipment that may be used post operatively such as: | | | | | | | | | | | |
| ■ ~1 | I.V. equipment | 0 | - | 0 | - | 151 | 100 | | | | | |
| 3 | Nasogastric tube | - | - | - | - | 151 | 100 | | | | | |
| 4 | E.C.G. monitor | - | - | - | - | 151 | 100 | | | | | |
| 5 | 0 ₂ mask | - | - | - | - | 151 | 100 | | | | | |
| 6 | Incision | - | - | - | - | 151 | 100 | | | | | |
| 7 | Dressing | - | - | - | - | 151 | 100 | | | | | |
| 8 | Sutures that will be used | - | - | - | - | 151 | 100 | | | | | |
| | Instruct the patient about exercise that he may be expected to perform after surgery such as: | | | | | | | | | | | |
| 9 | Deep breathing | - | - | - | - | 151 | 100 | | | | | |
| 10 | Coughing | - | - | - | - | 151 | 100 | | | | | |

| | Preoperative teaching | pperative teaching Perfect 3 | | tly Less perfe | | erfect 2 Never po | | M.S |
|----|-------------------------|------------------------------|---|----------------|---|-------------------|-----|-----|
| | Items | F | % | F | % | F | % | |
| 11 | Extremity exercises | - | - | - | - | 151 | 100 | 1.0 |
| 12 | movement and ambulation | - | - | - | - | 151 | 100 | 1.0 |

The mean of scores, frequencies and percentages for nurses performance toward nursing care on the night before

surgery

| | | Performance | | | | | | | |
|---|---|--------------|--------------------|----------------|-----------------------|----------|------------------------|------|--|
| | On the night before | Perfect F | Perfectly 3 F % | | Less perfect 2 F % | | Never perform 1 F % | | |
| | surgery-Items | | | | | | | | |
| 1 | Bowel preparation by anema | - | - | 5 | 3.3 | 146 | 96.7 | 1.03 | |
| 2 | Ask patient to take shower | - | - | - | - | 151 | 100 | 1.0 | |
| 3 | Restrict food and fluids for about 8 hours before surgery | - | , - | IS | Vbfe | m | ».V | | |
| 4 | Provide psychological support to the patient and his family | 1 | 1 ' | 15 1 | 9.9 | 136 L | 90.1 | 1 | |

The mean of scores , frequencies and percentages for nurses performance toward nursing care on the day of the surgery

| | | Performance | | | | | | | | |
|-----|---|-------------|---|-------------------|------|-----------------|------|------|--|--|
| P3E | On the day of surgery | Perfectly 3 | | Less perfect 2 | | Never perform 1 | | M.S | | |
| | Items | F | % | F | % | F | % | | | |
| 1 | Verify that the patient consent had been | - | - | 10 | 6.6 | 141 | 93.3 | 1.06 | | |
| 2 | Administrating ordered preoperative medication | - | - | 20 | 13.2 | 131 | 86.8 | 1.13 | | |
| 3 | Complete preoperative check list and chart | - | - | - | - | 151 | 100 | 1.0 | | |
| 4 | Has he an identification bracelet | - | - | - | - | 151 | 100 | 1.0 | | |
| | Assuring removal of accessories: | | | | | | | | | |
| 5 | Hair pins | - | - | - | - | 151 | 100 | 1.0 | | |
| 6 | Nail polish | - | - | - | - | 151 | 100 | 1.0 | | |
| 7 | Jewelry | - | - | 20 | 13.2 | 131 | 86.7 | 1.13 | | |
| 8 | Dentures | - | - | - | " | 151 | 100 | 1.0 | | |
| 9 | Contact lenses | - | - | - | | 151 | 100 | 1.0 | | |
| 10 | Skin preparation for surgery | - | - | - | - | 151 | 100 | 1.0 | | |
| 11 | Empty the bladder by send the patient to the toilet | - | - | - | - | 151 | 100 | 1.0 | | |
| 12 | Instructing the patient to wear hospital gown | - | - | 55 | 36.4 | 96 | 63.5 | 1.36 | | |

The mean of scores, frequencies and percentages for nurses performance toward postoperative nursing

| | | Performance | | | | | | |
|----|--|-------------|-----|-------------------|--------|-----------------|------|-------------|
| | Postoperative nursing care | | tly | Less perfect 2 | | Never perform 1 | | M.S |
| | Items | F | % | F | % | F | % | |
| 1 | Prepare the surgical bed | - | - | - | - | 151 | 100 | |
| 2 | Obtain the patient record from the theater | - | - | - | - | 151 | 100 | |
| 3 | Transfer the patient from the theater to the ward | - | - | - | - | 151 | 100 | |
| 4 | Position the patient properly | - | - | 15 | 9.9 | 136 | 90.0 | i :∎- |
| 5 | Make the patient comfortable | - | - | 15 | 9.9 | 136 | 90.0 | 1.091 |
| 6 | Raise the beds side rails | - | - | 15 | 9.9 | 136 | 90.0 | • |
| 7 | Clinical assessment in immediate post operative period | - | - | 23 | 15.23 | 128 | 84.7 | i :f |
| 8 | Assess level of consciousness (patient perception of: | | | | | 151 | 100 | |
| 9 | (Place , time , person) Skin color | | - | | | 151 | 100 | |
| 10 | Mucous membrane of the mouth | | - | - | | 151 | 100 | |
| 11 | Monitor patients' respiratory status | | | _ | | 151 | 100 | |
| 12 | Record patients' respiratory status | _ | | _ | _ | 151 | 100 | 1 |
| 13 | Monitor patients' pulse rate | | - | - 18 | - 11.9 | 133 | 88.0 | i: |
| 14 | Record patients' pulse rate | | - | 15 | 9.9 | 136 | 90.0 | i.:- |
| 15 | Monitor patients' blood pressure | | - | 20 | 13.2 | 131 | 86.7 | 1.i:• |
| 16 | Record patients' blood pressure | | - | 5 | 3.3 | 146 | 96.7 | 1:_; |
| 17 | Assess patients' temperature | | - | - | | 151 | 100 | |
| 18 | Record patients' temperature | | - | - | - | 151 | 100 | • |
| 19 | Assess the patients' infusion sites | | - | - 84 | 55.6 | 67 | 44.4 | |
| 20 | Assess surgical wound dressing | - | - | 55 | 36.4 | 96 | 63.6 | |
| 21 | Assess if there is any draines of tubes in site of the wound | | | 55 | 36.4 | 96 | 63.6 | |
| | Assess in there is any drames of tubes in site of the wound. | | | 00 | | | | |
| 22 | Control pain by giving medication as order | | | 66 | 43.7 | 85 | 56.3 | |
| 23 | Administer post operative medication | | | 96 | 63.6 | 55 | 36.4 | |
| 24 | Remove all fluid from patient bed side until he is allowed to eat or drink | 0 | 0 | 0 | 0 | 151 | 100 | |
| 25 | Monitor I. V. fluid | | | 20 | 13.2 | 131 | 86.8 | |
| 26 | Record type of I.V fluid | 0 | 0 | 0 | | 151 | 100 | |
| 27 | Record amount of I.V fluid | 0 | 0 | 0 | | 151 | 100 | |
| 28 | Change position every 4 hr. | 0 | 0 | 0 | | 151 | 100 | |
| 29 | After 8 h start | | | | | 151 | 100 | |
| | - Small amount of fluid orally | | | | | | | |
| | - Soft diet | | | | | | | |
| | - Normal diet | | | | | | | |
| 30 | Teach the patient to do: | 0 | 0 | 0 | 0 | 151 | 100 | |
| | - Deep breathing | | | | | | | |
| | - Coughing | | | | | | | |
| | - leg exercises | | | | | | | |
| | - Movement and ambulation | | | | | | | |
| | | 1 | 1 | 1 | 1 | | 1 | |