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Original Article

Appraising Quality of Nursing Practices in the Medical and Surgical Wards of Public Hospitals in Erbil City

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ABSTRACT

Background and objectives: Appraising the quality of nursing practices is a cornerstone for improving the nursing services. The objective of the study was to appraise the quality of nursing care provided to patients in the medical and surgical wards

Methods: A cross-sectional study was conducted in the medical and surgical wards of Hawler, Rizgary, and the Maternity Teaching Hospitals located in Erbil city, Kurdistan region of Iraq, starting from December 17, 2016, until September 30, 2017. The researcher used to visit the hospital wards four days per week in order to monitor the nursing practices using a questionnaire adapted from the WHO. All the nurses were included in the study except for those who were not present during the researcher's visit. Data were analyzed by the SPSS program, and a p-value of less than 0.05 was considered significant.

Results: Only 37.8% of the nurses performed assignments in a good manner, and none performed assignments in a very good manner. Nearly all the nurses performed poorly in the following areas: disposal of soiled linen promptly; ventilation and adequate lighting in the ward; cleanliness in ward/room; hand washing before and after patient treatment; and observation rules and upholding standards. Results showed that 52.7% of nurses showed a genuine interest in the comfort and health improvements of patients.

Conclusions: The performance of nurses working in Erbil public hospitals was, in general, not so satisfactory (fair). It is recommended to engage the nurses in courses of continuing professional development (CPD) and to set standards for nursing care in the mentioned hospitals.

Keywords: Nurses; Appraisal; Assessment; Performance; Erbil

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INTRODUCTION

Nurses represent the largest occupational group in the healthcare workforce, providing the most care at all levels of the care continuum and accounting for a significant proportion of hospitals' operating costs. Yet nursing's contribution most often remains invisible to policy-makers and healthcare managers, and many analysts consider it undervalued and understudied [1].Nurses are nearly always available on the ward, monitoring patients' conditions and delivering patient care. Many studies have found that nurses assume responsibility for first contact and ongoing care for all presenting patients. They are the key personnel in providing direct patient care. Anything that affects nurses' work can directly affect the quality of nursing care [2]. Registered nurses complete a wide variety of tasks in the work shift, ranging from simple activities such as gathering items to complex coordination with other nurses, physicians, aides, social workers, physical therapists, and others. Information on

such intricate nurse workflow is useful in assessing performance, the efficiency of care, and resource planning and allocation, all of which are of immediate importance given the challenges facing the nursing profession and today's healthcare delivery system [3]. Nurses carry out many types of activities starting from simple ones like holding the patient's hand, to complicated technical procedures. The person who receives the care is the central focus of nursing care and the physical, emotional, social and spiritual dimensions of that person should be considered when providing the care [4].The quality of health care is of great importance to patients' outcomes and their safety, however, improvements in this aspect is still slow. Review of the literature showed that the practicing nurses had a trivial role in the improvement programs of health care [5].Research shows that a heavy nursing workload adversely affects patient safety. Furthermore, it negatively affects nursing job satisfaction and, as a result, contributes to high turnover and the nursing shortage [6]. Nurses will have the ability to demonstrate the impact of nursing care on patient outcomes [7]. The nursing process is an orderly systematic manner of determining the client's health status specifying the problems, initiating and implementing plans to solve them and evaluating the extent to which the plan was effective. Clinical Practice Guidelines (CPGs) are relatively new quality improvement tools which is developed for maintaining quality, minimizing costs and improving out comes. The quality of nursing care is monitored based on the nursing process where nurse decides, plans, implements and evaluates the nursing care [8]. The objectives of the study were to appraise the quality of nursing care provided to patients in the medical and surgical wards and to find out the association between the quality of nursing care and some nurses' demographic characteristics such as age, gender, level of education, and duration of experience in nursing.

METHODS

A cross-sectional study was conducted in the medical and surgical wards of Hawler, Rizgary, and the Maternity teaching hospitals located in Erbil city, Kurdistan region of Iraq, starting from December 17, 2016, until September 30, 2017.The researcher used to visit the hospital wards four days per week, either during the morning shift, evening shift and during the night shift. All the nurses who were in charge during the presence of the researcher in the hospital have been included in the study (74 nurses were included using the convenience method of sampling), knowing that the total number of nurses in the mentioned wards was 104 nurses. No nurse was excluded from the study. In the present study, the researcher developed and used a structured observational checklist (standardized checklist) of the WHO [9] after modification for assessment of the quality of nursing care which was divided into two parts: Part I consisted of items related to the demographic data such as age, gender, educational qualifications and years of work experience. Part II consisted of 20 items related to various aspects of nursing. Items categorized under seven main dimensions which are (adequate staff, patient's care, nurses' neatness, health, adaptability, loyalty, and environment). A five-point Likert scale was used to assess each item, giving one score for the very bad and five scores for the very good. Accordingly, a 100 score scale was calculated (20 questions X five scores). Ethical approval was obtained from the research ethics committee of the college of nursing (No. 60, dated Dec 17, 2017). Statistical analysis: The Statistical Package for Social Sciences (SPSS, version 22) was used

for data entry and analysis. The chi-square test of association was used to compare proportions. Fisher's exact test was used (instead of Chi-square test) when the expected count of more than 20% of the cells of the tables was less than 5. A p-value of ≤ 0.05 was considered as statistically significant.

RESULTS

The total number of nurses was 74, their mean age + SD was 37.35 + 9.27 years, ranging from 22 to 63 years. The median was 35 years. Around half (48.6%) of the sample aged 30-39 years as presented in table 1 which shows that 62.2% of the sample were females. More than one third (37.8) of the nurses were working in Rizgary teaching hospital, and another 37.8% were working in Hawler teaching hospital and 24.3% were working in the Maternity teaching hospital The majority of the nurses were working in surgical wards (71.6%), and the rest were working in medical wards. The table shows also that the majority (79.7%) of the nurses were married. Table 2 shows that there was a shortage of nurses during the day (Q1), and during the night (Q2). The table shows that only 37.8% of the nurses perform assignments in a good manner, and none of them perform assignments in a very good manner (Q3). The performance of nurses was very bad or bad in the following areas: Q19: Disposal of soiled linen promptly (100%); Q20: Adequate lighting in the ward (98.7%); Q18: Cleanliness inward/room (98.7%); Q10: Hand washing before and after patient treatment (98.6%); Q17: Observe rules and uphold standards (90.6%); Q4: Show a genuine interest in comfort and progress of patients (52.7%). On the other hand, the performance of nurses was good in the following areas: Q9: Observe good health habits, cleanliness , good posture (89.2); Q16: Avoid criticism or comments before the patient (87.8%); Q13: Show understanding and courtesy to her/his co-workers (86.5%); Q6: Establish good rapport with patients (81.1); Q14: Meet new situation calmly (77%); Q15: Accept suggestions for improvement graciously (73%); Q7: In uniform- without jewelry and tidy (66.2). The performance in the other areas was neutral as mentioned in Table 2.

Table 1: Demographic characteristics of the study sample

Variable	No.	(%)
Age (years)		
< 30	14	(18.9)
30-39	36	(48.6)
40-49	17	(23)
≥ 50	7	(9.5)
Gender		
Male	28	(37.8)
Female	46	(62.2)
Hospital		
Rizgary Teaching Hospital	28	(37.8)
Hawler Teaching Hospital	28	(37.8)
Maternity Teaching Hospital	18	(24.3)
Ward		
Medical	21	(28.4)
Surgical	53	(71.6)
Marital status		
Married	59	(79.7)
Single	15	(20.3)
Total	74	(100)

Table 2: Distribution of sample by the performance of nursing personnel.

Performance score (5 points Likert scale)									
1 (very bad)		2 (bad)		3 (neutral)		4 (good)		5 (very good)	
No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Q1-Adequate staff available at the ward									
15	(20.3)	53	(71.6)	6	(8.1)	0	(0)	0	(0)
Q2- Adequate staff available at the night									
74	(100)	0	(0)	0	(0)	0	(0)	0	(0)
Patient-does she/he									
Q3- Perform assignments skillfully									
0	(0)	3	(4.1)	43	(58.1)	28	(37.8)	0	(0)
Q4- Show a genuine interest in comfort and progress of patients									
0	(0)	39	(52.7)	29	(39.2)	6	(8.1)	0	(0)
Q5- Observe and report unusual incidents and symptoms									
0	(0)	11	(14.9)	45	(60.8)	18	(24.3)	0	(0)
Q6- Establish a good rapport with the patient									
0	(0)	0	(0)	14	(18.9)	60	(81.1)	0	(0)
Neatness-does she/he									
Q7- In uniform- without jewelry and tidy									
8	(10.8)	4	(5.4)	9	(12.2)	49	(66.2)	4	(5.4)
Q8- In work- does she return articles to their proper place and aid in keeping units neat									
0	(0)	1	(1.4)	38	(51.4)	35	(47.3)	0	(0)
Health-does she/he									
Q9- Observe good health habits, cleanliness, and good posture									
0	(0)	0	(0)	8	(10.8)	66	(89.2)	0	(0)
Q10- Hand washing before and after patient treatment									
51	(68.9)	22	(29.7)	1	(1.4)	0	(0)	0	(0)
Q11- Use hand rub gel with gloves									
8	(10.8)	19	(25.7)	34	(45.9)	13	(17.6)	0	(0)
Q12- Provide nursing service immediately even if too busy									
0	(0)	5	(6.8)	64	(86.5)	5	(6.8)	0	(0)
Adaptability-does she/he									
Q13- Show understanding and courtesy to co-workers									
0	(0)	0	(0)	10	(13.5)	64	(86.5)	0	(0)
Q14- Meet new situation calmly									
0	(0)	0	(0)	17	(23)	57	(77)	0	(0)
Q15- Accept suggestions for improvement graciously									
0	(0)	0	(0)	20	(27)	54	(73)	0	(0)
Loyalty-does she/he									
Q16- Avoid criticism or comments before the patient									
0	(0)	0	(0)	9	(12.2)	65	(87.8)	0	(0)
Q17- Observe rules and uphold standards									
1	(1.4)	66	(89.2)	6	(8.1)	1	(1.4)	0	(0)
Environment-does she/he									
Q18- Cleanliness inward/room (sheets, floor)									
54	(73)	19	(25.7)	1	(1.4)	0	(0)	0	(0)
Q19- Nurses dispose of soiled linen promptly									
63	(85.1)	11	(14.9)	0	(0)	0	(0)	0	(0)
Q20- Adequate lighting in the ward									
60	(81.1)	13	(17.6)	1	(1.4)	0	(0)	0	(0)

Results showed that the mean total scores was 54.52 out of 100, the median was 55, ranging from 45 to 63 out of 100.

Those who scored less than 55 out of 100 were considered as having low scores (44.6%), and the rest (55.4%) as having high performance scores, as presented in Table 3.

Table 3: Distribution of nurses according to total performance score

Scores (out of 100)	No.	(%)
45-49	7	(9.5)
50-54	26	(35.1)
55-59	35	(47.3)
60-64	6	(8.1)
Total	74	(100)

Table 4 shows that nearly two thirds (64.3%) of nurses in the Rizgary teaching hospital got a high-performance score, compared with 50% in each of Hawler's teaching hospital and the Maternity hospital, but the differences were not significant (p = 0.487). A higher proportion of nurses in the medical wards (61.9%) got high scores than the surgical wards (52.8%), but the difference was not significant (p = 0.479). The performance of female nurses was better than the male nurses, where it is evident in the table that 60.9% of females got high scores compared with 46.4% of males (p = 0.225).

Regarding the marital status, more than half (59.3%) of married nurses got a high-performance score, while only 40% of single nurses got high scores (p = 0.179).Regarding the No. of years of formal education, the majority (80.0%) of the nurses who got high scores were in the secondary school of nursing, while only 40% of single nurses got high scores (p = 0.179).Regarding the duration of service, around two-thirds (60%) of the nurses with ≥20 years of experience got high scores (p = 0.738).

Table 4: Nurses' performance scores by the hospital, ward type, gender, and marital status.

	Low score		High score		Total		P-value
	No	(%)	No.	(%)	No.	(%)	
Hospital							
Rizgary teaching hospital	10	(35.7)	18	(64.3)	28	(100)	
Hawler teaching hospital	14	(50)	14	(50)	28	(100)	0.487
Maternity teaching hospital	9	(50)	9	(50)	18	(100)	
Ward							
Medical	8	(38.1)	13	(61.9)	21	(100)	0.479
Surgical	25	(47.2)	28	(52.8)	53	(100)	
Gender							
Male	15	(53.6)	13	(46.4)	28	(100)	0.225
Female	18	(39.1)	28	(60.9)	46	(100)	
Marital status							
Married	24	(40.7)	35	(59.3)	59	(100)	0.179
Single	9	(60)	6	(40)	15	(100)	
Total	33	(44.6)	41	(55.4)	74	(100)	

Table 5: Nurses' performance scores by years of formal education and duration of service

	Low score		High score		Total		P-value
	No.	(%)	No.	(%)	No.	(%)	
No. of years of formal education							
9	1	(20)	4	(80)	5	(100)	
12	10	(37)	17	(63)	27	(100)	
14	22	(53.7)	19	(46.3)	41	(100)	0.236*
16	0	(0)	1	(100)	1	(100)	
Duration of service							
<10	15	(50)	15	(50)	30	(100)	
10-19	10	(41.7)	14	(58.3)	24	(100)	0.738
≥ 20	8	(40)	12	(60)	20	(100)	
Total	33	(44.6)	41	(55.4)	74	(100)	

* Fisher's Exact Test.

DISCUSSION

It was evident that there was a shortage of nurses, especially at night. A shortage of staff could be considered as a contributing factor for poor nurse performance, and this was supported by a study done in Namibia by Soilkki et al (2014) [10], and a study was done in Egypt by Sleem and El-Sayed (2011) [11]. In general, one nurse should serve a maximum of five patients, but according to the researcher's observation one nurse served around 10 patients especially at night (12) knowing that the number of patients is not fixed everyday.

The performance of nurses was *very bad or bad* in the following areas: Disposal of soiled linen, ventilation, cleanliness of the ward/room. This may be attributed to the presence of a 'cleaning services company', accordingly, the nurses feel that they are not responsible for these tasks. Hand washing before and after patient treatment was not practiced by the nurses because there was no special washbasin in the ward, so the nurses used to use the hand sanitizers instead. Noncompliance with the observing rules and upholding standards, and showing a genuine interest in comfort and progress of patients was poor. The reason for this could be due to poor training of the nurses, knowing that the majority of them were not college graduates. A study done in Malawi by Montgomery et al (1949) showed that some challenges identified by the health care providers can hinder the implementation of standards including a shortage of staff, high workload, and inadequate knowledge and skills [13]. Another study done in Erbil by Al-Banna (2018) showed that the highest percentage of the participants (nurses) answered that they were dissatisfied with the use of skills and abilities, and work activities [14].On the other hand, the performance of the nurses was good in the following areas: Personal cleanliness, and good posture; avoiding criticism or comments before patient; showing understanding and courtesy to her/his co-workers; establishing a good rapport with patients; meeting new situations calmly; accepting suggestions for improvement graciously; and wearing the tidy uniform- without jewelry. Overall levels of quality of nursing care Regarding the quality of nursing care in the ward, table 4 showed that more than half of the nurses provided a high level of quality of care. A study done in Erbil hospitals by Qadir (2015) showed that the highest percentage (75.7%) of nurses provided a fair level of quality of care and the rest provided a good level of quality of care [15]. The result of the study done by Al-Fatlawy (2012) in Najaf showed that the nursing care did not reach the desired level due to the deficiency in the level of knowledge and practice of the nursing staff and its effect on the type of nursing care [16].It was supported by the study done in Delhi by Ara et al (2015) which showed that the majority (77%) of the staff nurses provide average quality of nursing care [17]. This also was consistent with a study done in the West Pomerania Province by Rotter et al (2014) [18] on nurses working at medical, surgical and psychiatric wards, which showed that more than half of them rated as moderate. This finding was consistent with Trin koff et al (2010) [19] who conducted a study on nurses working in the American Center and found the level of performance was moderate. Kamati et al (2014) conducted a study on nurses working at the referral and training hospital in Namibia and stated that the majority of nurses rated their level of performance at a moderate level [20].In contrast, Shang et al (2013) who conducted a study on nurses working in medical, surgical and

oncology units and mentioned that nurses rated their level of performance as bad [21]. The present study showed no significant differences between nurses' performance scores of medical and surgical wards. A similar study done by Soliman et al (2015)in El Mansoura, Egypt, showed no significant differences between the mean scores for nurses' caring behavior (performance) in medical and surgical wards [22]. The present study also revealed that there was no significant association between the quality of nursing care with nurses' age, educational level and years of work experience. This coincides with the results of a study done in Delhi by Ara et al (2015) which showed that there was no significant association between quality of nursing care performance by staff nurses and their age, educational level, and duration of service [17]. One of the limitations of the study is that not all the nurses were included in the study (we included the majority of them). Some of the items of the questionnaire doesn't fit exactly the current system of Erbil hospitals. The strength of this study is that this study will form a baseline for future researches in order to improve the nursing care in Erbil hospitals. It is recommended to create a system for monitoring and evaluation of the health care delivery. All the stakeholders should be involved in that system. Providing training programs for nurses to improve performance, decrease time waste, and increase patient care time. Conducting continuing education programs (training courses) for the nurse managers about: management functions (clinical, managerial, professional skills) and how it can be used to empower subordinates to increase productivity. It is recommended to engage the nurses in courses of continuing professional development (CPD) and to set standards for nursing care in the mentioned hospitals.

CONCLUSION

The performance of nurses working in Erbil governmental hospitals was, in general, not so satisfactory (fair).

CONFLICT OF INTERESTS

The authors report no conflict of interest

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