



EVALUATION OF NURSES PRACTICE REGARDING INDWELLING CATHETER IN AL-NAJAF HOSPITALS.

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Abstract:

Objective: this study aimed to evaluate of nurse's practice regarding indwelling catheter in Al-Najaf hospitals and to find out the relationship between nursing practice and their demographic data.

Methodology: Descriptive evolutionary study (Quantitative) was carried out to evaluate the Nurses practice regarding to indwelling catheter in Al-Najaf City/ Health Directorate of Al-Najaf Al-Ashraf / Al-Sadder medical city and Al-Zahraa teaching hospitals .The study was carried out from January 1st, 2018 up to March 20th, 2018. A non-probability (purposive) sampling technique was used consisting of (60) female nurses that perform indwelling catheter procedure. Data collected through using of a well-designed questionnaire consist of two parts including, Part I: Socio-demographic Characteristics: This part consists of (7) items,(including gender, age, and marital status, level of education, occupational status, residency, and socio-economic status) and Part II: indwelling catheter insertion checklist, that consisting of 21 questions about indwelling catheter insertion. **Result:** The findings of the present study indicate that the overall evaluations for nurse's practices are good. In addition there are non- significant relationship between the nurses' practices and their demographic data except with their economic status at p-value less than 0.05. **Conclusions:** It is concluded that most of the nurses have good practices related indwelling catheter procedure. **Recommendations:** Based on study conclusion, its need for a conducting and developing catheterization research that may contribute in reducing infectious problems of patient who need temporary or permanent for urinary catheter. Involving the nursing staff in educational courses to motivate their knowledge and practices about urinary catheterization.

INTRODUCTION

Urinary tract infection attributed to the use of an indwelling urinary catheter is one of the most common infections acquired by patients in health care facilities [1; 2], accounting for 70–80% of these infections are attributable to use of an indwelling urethral catheter [3]. Indwelling urinary catheters are widely used, with an estimated 15% to 25% of hospitalized adults having an indwelling catheter for a portion of their hospitalization [4; 5]. Previous research studies reveal that specific catheter-care practices can reduce entry of organisms into the usually sterile urinary bladder. Urethral catheterization is a routine medical procedure that facilitates direct drainage of the urinary bladder. It may be used for diagnostic purposes (to help determine the etiology of various genitourinary conditions or when intake and output are being monitored) or therapeutically (to relieve urinary retention, instill medication, or provide irrigation) [6]. Catheters may be inserted as an in-and-out procedure for immediate drainage, left in with a self-retaining device for short-term drainage (eg, during surgery), or left indwelling for long-term drainage for patients with chronic urinary retention. Urinary catheters come in many sizes and types. They can be made of (rubber, plastic (PVC) and silicone) [7]. **Importance of study:** According to an article in BMC Urology, indwelling urinary catheters are the leading cause of healthcare-associated urinary tract infections (UTIs). Therefore, it's important to routinely clean catheters to prevent infections [8]. Most catheter associated urinary tract infections involve multiple organisms and resistant bacteria from catheter associated biofilms. Catheter are a good medium for bacterial growth because once they gain access to the urinary tract, bacteria produce various adhesions, including hair like fimbriae that allow them to firmly attach to the catheter wall. [9]. Nurses can help to prevent catheter-associated urinary tract infections by using aseptic technique on insertion, following best practice in ongoing care and promptly removing catheters [10]. This study was important to discover practice regarding indwelling urinary catheter care in Al-Najaf city hospitals. The result of the study would improve nursing practice about standard management of indwelling catheter care and identified break for further work on the use of standard guidelines within hospital.

METHODOLOGY

Descriptive evolutionary study (Quantitative) was carried out to evaluate the Nurses practice regarding to indwelling catheter in Al-najaf city hospitals. The research was carried out at Al-Najaf City/ Health Directorate of Al-Najaf Al-Ashraf / Al-Sadder medical city and Al-Zahraa teaching hospital. The study was carried out from January 1st, 2018 up to march 20th, 2018. A non-probability (purposive) sampling technique was used consisting of (60) female nurses that perform indwelling catheter procedure in al-Najaf hospitals. An assessment tool was adopted and developed by the researcher to evaluate the nurses' practice regarding indwelling catheter. The complete instrument of the study consists of (2) parts:

Part I: Socio-demographic Characteristics: This part consists of (7) items, including gender, age, and marital status, level of education, occupational status, residency, and socio-economic status. **Part II: indwelling catheter insertion checklist:** This part of the questionnaire is consisting of 21 questions about indwelling catheter insertion.

The questionnaire validity faces validity for the initial developed instrument which is specified through panel of (5) experts from faculty of Nursing/University of Kufa (with experience of > 5 yrs at their jobs field). Who were asked to review the instrument, and to inspect relevancy, clarity, and sufficiency of the questionnaire to measure the concept of interest.

The data collection was done through the developed questionnaire and by means of two observation technique for each one of the study subjects. The data collection was carried out from February 10th, 2018 to February 28th, 2018.

Table (1): Statistical distribution of the study sample according to their demographic data.

Demographic data	Rating and interval	Frequency	Percent
Age	<= 25	24	40.0%
	26 – 32	21	35.0%
	33 Up	15	25.0%
Gender	Female	60	100.0%
	Male	0	0.0%
Marital Status	Married	39	65.0%
	Single	18	30.0%
	Divorced	3	5.0%
	Widow	0	0.0%
	Separated	0	0.0%
Level of education	Preparatory	15	25.0%
	Institute	18	30.0%
	College	27	45.0%
	M.Sc.	0	0.0%
	Ph.D.	0	0.0%
Economic of state	Sufficient	21	35.0%
	Barely sufficient	30	50.0%
	Insufficient	9	15.0%
Residency	Urban	54	90.0%
	Rural	6	10.0%
Training course	Yes	48	80.0%
	No	12	20.0%
Years of experience	<= 5	30	50.0%
	6 – 10	18	30.0%
	11 Up	12	20.0%
Total		60	

Freq= Frequency, %= Percent.

This table shows that the majority of the study sample (40%) are at age group (25) years old. regarding of the study sample, all the study sample were female. In regards to marital status the highest percentage (65%) are married, and (45%) are collagenous. concerning socio-economic status, about half of the sample (50%) reveal their economic status who are barely sufficient, and (90%) are living in urban residents. While regarding training course, the majority of the study sample (80%) were trained. In addition about half (50.0%) of study sample at Years of experience (<=5) years and lowest percentage (20%) more than (11) years.

Table (2): Overall evaluation of nurse’s practice regarding indwelling catheter.

Indwelling Catheter (Items)	Rating	Frequency	Percent	M.S	Assessment
Overall items	Poor practice	34	56.7%	1.79	Good
	Good practice	26	43.3%		

Cutoff: 1.5 (mean of score <= 1.5 Poor, Mean of score > 1.5 Good)

Table (3.2) shows that the overall assessment for nurses practices are good.

Table (10): Relationship between nurse’s practice and their demographic data.

Item	Statistical analysis	result
Age	Chi-square	4.167
	df	2
	Sig.	.125
Marital Status	Chi-square	3.590
	df	2
	Sig.	.166
Level of education	Chi-square	2.593
	df	2
	Sig.	.274
Economic of state	Chi-square	9.206
	df	2
	Sig.	.010
Residency	Chi-square	.741
	df	1
	Sig.	.389
Training course	Chi-square	1.667
	df	1
	Sig.	.197
Years of experience	Chi-square	5.000
	df	2
	Sig.	.082

This table (3-3) shows that there is a non- significant relationship between the nurses' practices and their demographic data except with their economic status at p-value 0.01.

DISCUSSION OF THE RESULT:

Part-I: Discussion of the study sample demographic data:

According to (Table 3.1) in the results, the study shows that the entire study sample are female.

Regarding their age, the majority of the research samples (40.0%) are at age group of (25) yrs and less. This is in consistency with [11] who mentioned that the common age of research sample is at age group of (20-30).

Concerning the marital status the majority of the study subjects (65.0%) are married. These results opposite to the [12] research result that represent the majority of the research sample marital status are unmarried.

In related to the level of education the majority of the study samples (45%) are with BSN. This is unlikely to the study result of [13] that represent that majority of the study participant with diploma.

Concerning socio-economic status, about half of the sample (50%) reveals their economic status that is barely sufficient, while concerning the residency the study result show that highest percentage of the study sample are lived in urban area. This is come because the nursing salaries in Iraq are limited, and approximately all the subject (90%) are lived in Al-Najaf Al-ashraf.

Regarding to the study sample training course, the highest percentage of the study sample (80%) are trained. It is relatively like the [14] study result that mentioned the entire participant nurse who caring for patient with indwelling catheter were well practiced and trained.

According to the research subject years of experience. About half of the subject with 5 and less years of experience. This result is likely to the [13] which ,mentioned that about (52.9%) of the study subject has 1-2 years of experience.

Part-II: Discussion of the nursing practice regarding indwelling catheter.

(Tables 3.2) The study results represent that the overall evaluation of the Nurses' practice regarding indwelling catheter insertion is good at mean of score (1.79).

Part-III: Discussion the relationship between the Nurses'

Practices and their studied Demographical Characteristics:

(Tables 3.3) The study results indicate that there is a no significant relationship between the nurses' practices and their demographic data except with their economic status at p-value

(0.01). these results come because of the nursing skills acquired in the hospital during the procedure, so the levels of education and other demographic data are not affects the nurse's practice.

6-1: CONCLUSIONS:

- 1- The most of the nurses are at middle age group within (≤ 25) years old, the most of them are college graduated. It is found most of the nurses are have participating in training session. It's concluded that most of the nurses years' experience (≤ 30) years. It is concluded that there is no relationship between the nurse's demographic data and their practices except the nurse's economic status.
- 2- It is concluded that most of the nurses have good practices related indwelling catheter procedure.

6-2: RECOMMENDATIONS:

- 1- Conducting and developing catheterization research that may contribute in reducing infectious problems of patient who need temporary or permanent for urinary catheter.
- 2- Involving the nursing staff in educational courses to motivate their knowledge and practices about urinary catheterization.

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