Nurses Knowledge about Dressing Process in Surgical Wards in Mosul Hospitals

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ABSTRACT

Background and aim: Dressing is a covering or bandage applied to a wound, Bleeding cases, Open fractures and superficial burns to protect it, prevent the complication and the patient's dressings need to be changed regularly. The study aimed to identify the level of knowledge about Dressing Process among nurses and to examine the relationship between demographic characteristics of the nurses and their Knowledge with regard to Dressing Process.

Materials and Method: This descriptive study design as a quantitative approach was adopted through the period from 1st of August - 2011 to the 1st of September - 2012. The sample of the study included (140) nurses working in two hospitals in Mosul city in the center of Nineveh Governorate. In order to collect the data, a questionnaire was constructed depending on the previous studies and related literatures. Content validity of the questionnaire was determined by presenting the questionnaire to a panel of (15) experts and the reliability of the study was determined by applying the tool to (20) nurses in Ibn-Sina Teaching Hospital, while Person's Correlation Coefficient was ($r = 0.83$; $P.< 0.05$).

Results: The data analysis showed that there were significant statistical relationships among some categories of knowledge regarding Dressing Process with the attributes of the sample.

Conclusion: The study concluded that knowledge of dressing process acceptable, while gender and enrollment in training sessions had an obvious association with nurses' knowledge.

Keywords: Nurses, Knowledge, Dressing, Surgical Wards.

INTRODUCTION

Dressing is a covering or bandage applied to a wound to protect it, The patient's dressings need to be changed regularly (Adams *et al*., 2007). A dressing to promote designed to be in direct contact with the wound, which makes it different from a in place. Dressings are frequently used in first aid and nursing (Caruso *et al.,* 2004). Surgical dressings include both primary dressings (for example, therapeutic or protective coverings applied directly to wounds or lesions either on the skin or caused by an opening to the skin) and secondary dressings (for example, materials that serve a therapeutic or protective function and are needed to secure a primary dressing). For example, elastic bandages, adhesive tape, elastic roll gauze, and non-elastic roll gauze are covered when used as a secondary dressing to hold wound cover dressings in place (Corporate Medical Policy, 2008). A dressing can have a number of purposes, depending on the type, severity and position and cases, The purposes of dressing; Stem bleeding – Helps to seal the wound to expedite the clotting process, Absorb exudates – soak up blood, plasma and other fluids exuded from the wound, containing it in one place, Ease pain – some dressings may have a pain relieving effect, and others may have a placebo effect, Debride the wound – The removal of slough and foreign objects from the wound, Protection from infection and mechanical damage, and Promote healing (Caruso et al., 2004). Dressing types include: Low adherent dressings, Semipermeable films, Hydrocolloids, Hydrogels, Alginates, Foam dressings, Antimicrobial dressings, Unwanted effects of dressings and Wet to dry (Ackley *et al.,* 2007). Apply sterile dressings to open wounds and Open fractures and Cover superficial burns with sterile saline dressings and Bleeding should be treated with appropriate direct pressure dressings (American college of radiology, 2001). Conventional dressings are usually changed once daily. Some authorities prefer to have most patients return in 24 hours for the first dressing change. Home care consists of removing the dressing, removing all antibacterial cream, cleansing with a mild soap and water, and reapplying the dressing as previously outlined. Outpatient analgesics such as acetaminophen with codeine should be supplied for the first few dressing changes.

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Follow-up visits with a primary care provider at 3 and 7 days are recommended, with more frequent visits for supervised dressing changes if compliance is a problem. The parent is instructed to return if signs of infection develop (Henretig and Fred, 2008). The aim of the study was adopted to identify the level of Knowledge about Dressing Process among nurses and to examine the relationship between demographic characteristics of the nurses and their Knowledge with regard to Dressing Process.

MATERIALS AND METHOD

A descriptive study design was depended. Accidental sample of the study consisted of (140) nurses from two main teaching hospitals divided as; Al-Salam Teaching Hospital (15 female and 30 male) and Al-Jamhuri Teaching Hospital (16 female and 79 male) from 1st of August - 2011 to the 1st of September - 2012. The instrument depended in the study composed of two parts: Part one- included (7) items which focus on demographic characteristics of the nurse such as (Age, Gender, Years of experience, Educational level, Hospital, Number of Training sessions). Part two - concerns dressing categories; General information about dressing: (45) items; Information on the dressing process: (43) items; The items of " General information about dressing " have two options (No = 1; Yes = 2), while the items of the" Information on the dressing process " have rating answer on three options (Never = 1; Some time = 2 ; Always = 3) for that these items tend to be contributing mostly to precautions or practices more than knowledge. face or validity of the questionnaire was determined by presenting the questionnaire to a panel of (15) experts and the reliability of the study was determined by applying the tool on (20) nurses who were out of the study sample and conducted in Ibn-Sina Teaching Hospital, Person's Correlation Coefficient was computed (r = 0.83; P.< 0.05) level. Data were collected through this constructed questionnaire and Self-administered technique as a means of such collection. To describe and analyze the findings of the study, SPSS program was used to analyze the data as Percentage, Frequency, Mean, Standard Deviation, Paired - samples T – test, Independent T - test and Analysis of variance (ANOVA).

RESULTS

Table (1): Demographic Characteristics of the Study Subjects (N = 140)

Variables		No.	%
Age	20-24	7	5.0
	25-29	24	17.1
	30-34	**36**	**25.7**
	35-39	15	10.7
	40-44	13	9.3
	45-49	14	10.0
	50-54	21	15.0
	55-59	10	7.1
	Total	140	100.0
Mean = 37.2929 , Standard deviation = 10.33503			
Gender	**Male**	**109**	**77.9**
	Female	31	22.1
	Total	140	100.0
Years of experience	less than 5	28	20.0
	6-10	**37**	**26.4**
	11-15	24	17.1
	16-20	15	10.7
	21-25	18	12.9
	26-30	12	8.6
	31-35	3	2.1
	36-40	3	2.1
	Total	140	100%

Educational level	College	6	4.3
	Institute	31	22.1
	Preparatory nursing school	**96**	**68.6**
	Intermediate nursing school	7	5.0
	Total	140	100%
Hospital	**Al-Jamhuri**	**95**	**67.9**
	Al-Salaam	45	32.1
	Total	140	100%
Enrollment in training session	No	62	44.3
	Yes	**78**	**55.7**
	Total	140	100%

Table (2): The relationship between Theoretical and Operational Means of knowledge categories using t-test

Categories	Theoretical mean	Operational mean		d.f.	t-value	Sig.
		$\overline{X}$	SD			
General information about dressing	67.5	73.84	8.09	139	107.98	**S**
Information on the dressing process	86	84.25	19.15	139	52.06	**S**

Table (3): Analysis of variance of nurses' general knowledge and information of dressing process

Categories	SS		d.f.	MS	F	Sig.
General information about dressing	Between Groups	679.98	7	97.14	1.52	NS
	Within Groups	8420.55	132	63.79		
	Total	9100.54	139			
Information on the dressing process	Between Groups	10560.23	7	1508.6	4.92	**S**
	Within Groups	40414.50	132	306.17		
	Total	50974.74	139			

Table (4): Relationship between nurses' general knowledge and information of dressing process according to their gender

Categories	Gender	No.	$\overline{X}$	SD
General information about dressing	Male	109	73.88	7.92
	Female	31	73.67	8.77
t value = - 0,12 , d.f. = 138 , **Sig .**				
Information on the dressing process	Male	109	84.22	18.20
	Female	31	84.35	22.49
t value = -0,03 , d.f. = 138 **, Sig .**				

Table (5): Relationship between nurses' general knowledge and information of dressing process according to their educational level using ANOVA test

Categories	SS		d.f.	MS	F	Sig.
General information about dressing	**Between Groups**	55.97	3	29.43	0..28	NS
	Within Groups	9044.57	136	69.44		
	Total	9100.54	139			
Information on the dressing process	**Between Groups**	2584.80	3	578.78	2.42	**S**
	Within Groups	48389.93	136	357.15		
	Total	50974.74	139			

Table (6): Relationship between nurses' general knowledge and information of dressing process according to their enrollment in Training Session of the Study Sample using t-test

Categories	training courses	No.	$\overline{X}$	SD
General information about dressing	no	62	73.40	8.36
	yes	78	74.19	7.9
t value = - 0, 57 , d.f. = 138 , **Sig .**				
Information on the dressing process	no	62	84.74	18.13
	yes	78	83.87	20.02
t value = 0,26 , d.f. = 138 , **Sig .**				

DISCUSSION

It is obvious from table (2) that all means of dressing process categories were somewhat more than theoretical means and had statistical significant differences when comparing, this mean that nurses had an acceptable level of knowledge regarding dressing process.

Table (3) shows that the information on the dressing process was significant difference as category of dressing process knowledge in regard the age. The stage of age may affect the performance of nurses (AL-Simady, 2006).

All categories of knowledge of dressing process in this study had significant differences. Females got mean and standard deviation scores better than males as in table (4). Nurses working in the surgical units had an unsatisfactory level of knowledge and practice related to postoperative wound infection. Nevertheless, there was a significant difference between their knowledge and practice in that field (El-Sayed, 2003).

The findings of the present study shows that significant differences in the (Information on the dressing process) as category of dressing process knowledge with regard to the educational level of the sample. The level of education may affect the performance of nurses (AL-Simady, 2006; Najem, 2004). The relationship between knowledge and power helps to employ and implement strategies to reduce infection control and improve patient safety (WHO, 2009). Also referred that education helps to define what a nurse is able to do and what he or she can be expected to do (Coile, 2005). And indicated that nursing qualification have more knowledge than the general nursing staff, it was found to be statistically significant (Bibudha *et al.,* 2010).

In this study, the high percentage of the sample 78% did enroll in such specialized training session during their work period. Perhaps, this is one of the reasons, in the present study as in table (6) which presents both of General information about dressing and Information on the dressing process were significant differences with Training Session. Another indicated that the training session is important in developing the work of nurse, hence, nursing staff should have an advanced level of skill to provide safe and excellent patient care (Brook *et al.,* 2004). Also found via another study; That built a training model and evaluated training effectiveness in terms of improved knowledge conducted in (17) hospitals in Taiwan, that there is a statistical difference before and after the training course on participants' understanding (Lin *et al*., 2008). Tension and discomfort of nurses during the work usually results from decrease in the training and development (AL-Hadeedi, 2006).

CONCLUSIONS

According to the objectives of the present study and the results of data analysis, the following conclusions have been inferred: Knowledge of Dressing was acceptable. Presence of significant differences between theoretical and operational means regarding nurses' knowledge. Gender and Enrollment in training sessions had an obvious association with nurses' knowledge. Educational level and Age had less association with nurses' knowledge.

RECOMMENDATIONS

Depending on the findings and conclusions of the study, the researcher recommended the following: An educational program and continuous education are necessary to improve the nurses' ability dealing with management with acquisition of knowledge about Dressing. Take care of the environment of hospitals specially in surgical wards. Development of nursing curriculum to encompass all nursing care procedures needed for all nursing specialties and patient's unit care. Enhance or Increase numbers of females of the nursing profession by many social and put on a plan to enhance support and services for females to work in nursing.

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