

Evaluation of Nurses practice About Postoperative Wound Care At Al-Diwaniya Teaching Hospital

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ABSTRACT

Background:- Postoperative wound care is the primary and important aspect of the progression of surgical wound healing stages, as well as the primary prevention of wound infection.

Aim: To assess nurses 'practices towards postoperative wound care and to find out the relationship between demographics and nurses' practices.

Methodology: This descriptive study design study was adopted through the period from 1st of October 2020 to the 1st of February - 2021. The sample of the study included (70) nurses working in surgical ward of Al Diwaniya Teaching Hospital. In order to assess the nurses' practice about post-operative wound care. The instrument depended in the study composed of two parts: Part one- included (6) 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: included (42) items concerns general practice about post-operative wound care. Content validity of the questionnaire was determined by presenting the questionnaire to a panel of (11) experts and the reliability of the study was determined by applying the tool to (10) nurses in Al Diwaniya Teaching Hospital, while Person's Correlation Coefficient was ($r = 0.931^{**}$). The data was collected using self-administered questionnaire and it was entered, cleaned and analysed using SPSS version 23.

Results: The findings of the study reveals that, more than half of the nurses (54 %) at the age between 20 -28 years old. Concerning to gender results of study showed half of the study sample (50%) were female and (50%) of study sample were male. Most of them (60%) were single and reminder was married. Regarding to their educational status, majority (50%) of the nurses was secondary nursing school degree holders, (28%) of the nurses had up to diploma nursing holder and(22%) of the nurses were BSc degree holders. As regard their years of experience it was found that nearly three quarter of the nurses (72%) were 5 to 10 years. The majority of studied nurses had participated in training course. (50%) of the nurses had high level of practice regarding postoperative wound care, following by (40%) of total participants had moderate practice , finally few number of study participants (10%) were had poor practice . The finding of study demonstrated there is no significant association between nurse's practice and sociodemographic variables.

Conclusions: This study showed that more than half of the nurses had a high level of practice. The results of the study found that the relationship between the level of nurse practice and demographic characteristics was not statistically significant.

Keyword: Evaluation , postoperative, wound care , practice, nurse .

INTRODUCTION

Worldwide, an estimated 4511 operations per 100,000 population occur annually, equating to 1 surgical procedure each year for every 22 people. Surgical wounds are the most common wounds managed in acute care settings and are associated with a variety of complications such as bleeding and dehiscence. However surgical site infections are the most common complication—and they are also the most preventable hospital acquired infection ⁽¹⁾. Wound care is an important realm of nurses' clinical responsibilities. Provision of wound care demands thorough knowledge and competence, and the care should be based on the evidence available and up-to-date knowledge. With sufficient knowledge, both quality of care and patient safety can be improved; and when evidence-based interventions are implemented in clinical practice, it is possible to reduce the costs of care ^(2,3). Nurses play an important role in the prevention of surgical site infections and the healing of wounds through the dressing. Postoperative wound infection can arise from day one, but usually occurs between the fifth- and tenth-days following surgery, due to inadequate surgical wound care dressing ⁽⁴⁾ . The aim of the study was adopted to identify the level of Knowledge about postoperative wound care among nurses and to examine the relationship between demographic characteristics of the nurses and their Knowledge with regard to wound care.

METHODOLOGY

This study used a descriptive design study, to evaluate nurses practice regarding postoperative wound care who working in the general surgical department in Al-Diwaniya teaching hospital. The study was carried out from 1st of October 2020 to the 1st of

February - 2021. A non- probability purposive sample of (50) nurses (male and female), who were working in surgical wards, who met the sample criteria were included in the study. A set of structured questionnaires by reviewing different literatures, previous study, personal experience, interest in work felid and interview with nurses and physicians, and modified by the researcher was used in this study. It was developed in English and was translated in to Arabic and then the data was collected using self-administered questionnaire from the study subjects. It was designed to include part I: socioeconomic variables consists of (6) items such as age, gender, marital status, educational level, years of experience in surgical wards and training course. Part II: will have (42) questions that examine the level of nurses' practice regarding postoperative wound care. The correct response for each item receives a score of "2" and "1" for incorrect response .The pilot study was done on ten nurses from "surgical ward" to ensure validity and reliability of the instrument. Necessary correction and modification was made after reviewing by a panel of (11) the experts and the research instrument was finalized on the basis of the Test- retest reliability was determined through a computation of Pearson Correlations for the scales. Coefficients for the (38) items of postoperative wound care were ($r= 0.931^{**}$). The data were coded numerically and entered into statistical software (SPSS version 23) for analysis.

RESULTS

Table 1: Table 1: Socio-Demographic Characteristics of Respondents (50) Nurse

Variables	Categories	Frequency	%age
Age (years)	20- 28 Years	27	54.0
	29- 36 Years	8	16.0
	37- 44 Years	14	28.0

	53 Years	1	2.0
	Total	50	100
Gender	Male	25	50.0
	Female	25	50.0
	Total	50	100.0
Marital status	Married	19	38.0
	Single	30	60.0
	Widowed	1	2.0
	Total	50	100.0
Level of education	Secondary nursing school	25	50.0
	Nursing institute graduate	14	28.0
	Nursing of college	11	22.0
	Total	50	100.0
Experience of years	1-10	36	72.0
	11-20	13	26.0
	21-30	0	0
	31-40	1	2.0
	Total	50	100.0
Training sessions	Yes	63	86.0
	No	7	14.0
	Total	50	100.0

Frequency, Percent

This table showed that more than half (52%) of the respondents were in the age group 20-28 years. Related gender the study sample demonstrated equal in distribution between men and female, Fifteen percent of the respondents were female and the rest of them were male. 60% of the respondents were single followed by 38% were married, and remaining were widowed.. About 50% of the respondents had secondary nursing school level of education, followed by who had diploma in nursing (28%), and B.Sc. in nursing (22%). The majority (72%) of the respondents had 1 year and above years of service experience and the rest had more than 11-20 years' service experience (26%). The majority of studied nurses (86%) had participated in Training sessions related to postoperative wound care.

Table 2: Distribution of Total practice of Nurses toward Postoperative Wound Care

Variable	Frequency	Percentage
Poor	5	10.0
Moderate	20	40.0
High	25	50.0
Total	50	100.0

This table demonstrated that the majority of study sample (50%) had high level of practice toward postoperative wound care followed by (40%) of them have moderate practice and few number of study sample (10%) were had poor level of practice .

Table 3: The Association between Nurses' practice about post-operative wound care Score and the Demographic Characteristics.

Variable	Practice			
	Chi-Square Tests	df	P. value	Sig.*
Age	5.419 ^a	6	0.491	NS
Gender	.440 ^a	2	0.803	NS
Marital status	4.668 ^a	4	0.323	NS
Level education	3.870 ^a	4	0.424	NS
Experience	2.317 ^a	4	0.678	NS
Training	10.901 ^a	10	0.365	NS

df= degree of freedom p. value= probability value

Sig. = Significance level ≤ 0.05 = significant, NS= no Significant, HS = High Significant, S = Significant

This table indicates that there is no significant association between nurse's practice about postoperative wound care score and the demographic characteristics (age, gender, level of education, years of experience in surgical ward and years of employed in hospital).

DISCUSSION

Throughout the course of the data analysis of the current study, the findings showed that more than half (52%) of the respondents were in the age group 20-28 years. Related gender the study sample demonstrated equal in distribution between men and female, Fifteen percent of the respondents were female and the rest of them were male this result nearly to result of Hameed, he explained the male more than female⁵. 60% of the respondents were single followed by 38% were married, and remaining were widowed. About 50% of the respondents had secondary nursing school level of education, followed by who had diploma in nursing (28%), and B.Sc. in nursing (22%). The majority (72%) of the respondents had 1 year and above years of service experience and the rest had more than 11-20 years' service experience (26%). The majority of studied nurses (86%) had participated in training sessions related to postoperative wound care. These findings are in line with study done by other researcher who reported Almost all nurses had worked for ≥ 5 years whereas 16.3% of nurses had < 5 years of work experience. Nurses with secondary, college, and university education accounted for 55.8%, 25.6%, and 16.3%, respectively. Besides, 29 out of 43(67.4%) nurses used to attend training courses or workshops on wound care. However, no nurse described training courses or workshops in detail (6). These findings agreed with findings obtained from other study, who stated that, the that, more than half of the nurses at the age between 25 - 30 years old⁽⁷⁾. This finding were in accordance with results of study declared by Mohamed who illustrated that that around one half of nurses were aged between 20 to 30(8) years old Concerning sex, it was found that the majority of studied nurses were females. From the researcher point of view, this could be explained in light of the known fact that the majority of females in Egypt and the nature of nursing profession is a job for females, this findings supported by Sabouret al⁹ who mentioned that the majority of the nurses are females. The result also comes in agree with Mohamed et al⁹ whose study results revealed that all participants were females. As regards to their qualifications the present study revealed that, more than half of the nurses had secondary school holder in nursing while only (15% and 8.3%) respectively were bachelor degree and bachelor degree plus higher education in nursing, this result is disagree with Saeed et al¹⁰ who found that ,around one half of the sample had nursing diploma while only 10% were bachelor degree in nursing. this means that majority of nurses dealing with wound and in contact with patient are diploma nurses. This finding in disagree with Ibrahim¹¹ and Brouwers et al¹¹ whose study results mentioned that around half of the nurses were holding bachelor degree. In relation to nurses' years of experience, the result of the current study showed that, more than half of the nurses were from 1-10 years. The result comes in congruent with Sheta et al.,⁽⁸⁾ who noted in their study that, the majority of nurses had experience from 5-10 years. These findings agreed with study done by other researcher who reported that that majority of the study samples (60%) were females, most of them were age group between (18- 27) years old, a high percentage of them were institute graduate (38%), majority of them(74%) were married, (38%) were for (1-5) years were employment in nursing, Majority of them (34%) were employee (1-5) years in surgical wards, and finally most of nurses (70%) have training session¹³. Forty two questions utilized to explore nurses' practice concerning postoperative wound care. Majority of study sample (50%) had good level of practice toward postoperative wound care followed by (40%) of them have moderate practice and few number of study sample (10%) were had poor level of practice. This findings in the same line with study conducted by other researcher who contrast with a study in Pakistan and another study in Bangladesh in that the overall practice of staff nurses regarding preventing and managing surgical site infection was at a good level^{14,15}. This difference might be due to differences in sample size, attitude, training and workload of nurses regarding prevention of SSI. It might also be due to differences in the developmental level of the countries and the resulting shortage of resources as nurses reported that lack of resources to implement SSI prevention

activities was one of the major factors affecting their practice regarding prevention of SSIs. These findings with a study conducted in This study examine the level of nurse's practice regarding prevention of SSIs, and less than half (48.9%) of them were found having a good practice regarding prevention of SSI. This means, in the reverse more than half of the nurses were practicing poorly regarding prevention of SSI. This finding is in agreement with studies conducted in Bangladesh, Nigeria, Tanzania, and Ethiopia (Amhara regional state), in which the level of nurse's practice towards prevention of SSIs was at a low level^{16,17}. These studies suggested that the practice of nurses regarding prevention of SSI was affected by multiple factors giving lack of training on SSI prevention methods in line with the latest global and national guidelines with the latest recommendations as an example. in addition the findings highlights that those nurses with ≤ 26 year of employment showing the highest percentage (93%) with in moderate practice level. once again findings lead us to that moderate practice level were prominent in term of nurses experience in surgical ward with in (6-10) years of nurses experience in surgical ward. finally it's clear that nurses who never attained a training sessions in their entire carrier path in surgical care were the dominant which reflected by (83%) of them performed with In the category of moderate practice level There are no significant association between socio-demographic variables with nurses' practice concerning postoperative wound care at p value < 0.05 . This finding was in good agreement with results obtained from other study who reported that correlation between age and clinical experience of nurses with quality of their documents chi-square test was used, there was no meaningful statistical correlation between qualities of nurses' documents with their age ($\chi^2 = 1.34$, DF = 2, p = 0.51¹⁸). Our findings are similar to study done by other researcher who stated that there is no significant association between nurse's documentation for nursing care score and the demographic characteristics (age, gender, level of education, years of experience in surgical ward and years of employed in hospital¹⁹.

CONCLUSIONS

The results of this study point to the high number of nurses that working in surgical ward had good practice about the care of wounds.No significant association between nurses 'practice about postoperative wound care with demographic characteristics of nurses.

RECOMMENDATION

Based on the conclusions, the study recommended the following:-

1. An educational program and continuous education are necessary to improve the nurses' ability dealing with postoperative wound care.
2. Further study with replication of the current study on a larger sample is recommended to achieve wider utilization of the designed educational program for better quality of care.

In addition the findings highlights that those nurses with ≤ 26 year of employment showing the highest percentage (93%) with in moderate practice level. once again findings lead us to that moderate practice level were prominent in term of nurses experience in surgical ward with in (6-10) years of nurses experience in surgical ward. finally it's clear that nurses who never attained a training sessions in their entire carrier path in surgical care were the dominant which reflected by (83%) of them performed with In the category of moderate practice level. In addition the findings highlights that those nurses with ≤ 26 year of employment showing the highest percentage (93.0%) with in moderate practice level. once again findings lead us to that moderate practice level were prominent in term of nurses experience in surgical ward with in (6-10) years of nurses experience in surgical ward. finally it's clear that nurses who

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