

Effectiveness of an educational program on Nurses' Knowledge towards Nursing Management of Patients with Transurethral Resection of the Bladder Tumor at Hilla Teaching Hospitals

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Abstract

Bladder cancer is the fourth most prevalent tumor in men and eighth in women. Approximately 50,000 new cases are diagnosed annually in the around the world. The study aims at: assess nurse's knowledge regarding management of patients who undergo the transurethral resection of the bladder tumor. A descriptive study is conducted during the periods of July 29th 2018 to December 25th 2019. The study conducted in Hilla Teaching Hospital and Al'imam Alsadiq Teaching Hospital were the designated site for data collection. By non-probability "purposive sample" of (51) nurses, data were collected for pre-post test and analyzed a descriptive and inferential statistical data analysis approach. Results of the study depicts that age of the nurses ranged from 20- 43 years, (60%) of nurses in the control group, there were somewhat less female nurses (45.2%) than male nurses (54.8%) in the study group and (32%) were female and (68%) nurses male in the control group, (80.6% were married in the study group and 22 (88%) were married in the control group, education was from a secondary nursing school and institute degree (35.5%) for each degree in the study group, and (48%) institute degree in the control group, (1-5) years was (67.7%) in the study group and (68%) in the control group. Nurses knowledge in the study group has increased from (M.S. 1.3026) in the pretest time to (M.S. 1.6787) in post test time for the control group, this score has slightly increase from pre test (M.S. 1.2985) to post tests (M.S. 1.3343). There were concluded improving in nurses' knowledge after post-test for study group for educational program concerning management of patients with transurethral resection of the bladder tumor. While control group did not present any improvement in their knowledge concerning management of patients with transurethral resection of the bladder tumor at pre and post-test. It is need to be encouraging nurses to be enrolled in training sessions to improve their knowledge to keep them up to date toward management of patients with transurethral resection of the bladder tumor.

Key words: *Effectiveness, Knowledge, Transurethral Resection.*

Introduction

Cancer is the main cause of death worldwide and is creating a significant burden on society as a result of population growth and aging. Accurate information regarding cancer incidence is important for clinical decision making and appropriate cancer control [1]. Bladder cancer is the most common malignancy

of the urinary tract^[2]. Bladder cancer is the fourth most common noncutaneous malignancy in men and the incidence of bladder tumors is increasing in industrialized and developed countries ^[3]. In men, it is the fourth most common cancer after prostate, lung, and colorectal cancers, accounting for 6.2% of all cancer cases. In women, it is the eighth most common cancer, accounting for 2.5% of all cancers ^[4]. Its occurrence is strongly associated with cigarette smoking and the use of certain chemicals ^[5]. Symptoms are relatively specific, and what is more important are very obvious, haematuria is the presenting symptom in 85-90% of the patients with bladder cancer gross or microscopic,

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irritative voiding symptoms seem to be more common in patients with CIS [6]. Transurethral Resection of the Bladder Tumor under regional or general anesthesia is the initial treatment for visible lesions and is performed to remove all visible tumors and to provide specimens for pathological examination to determine stage and grade [7]. According to the American Cancer Society, bladder cancer will be responsible for 5% of all cancer diagnosed in the United States in 2017, with 79,030 patients expected to be diagnosed with the disease and 16,870 expected patient deaths from bladder cancer [8,9]. The majority of newly diagnosed patients with bladder cancer are male, which is thought to be related to an increased rate of smoking and occupational exposure [8].

Methodology

The study has been conducted in order to assess nurse’s knowledge regarding management of patients who undergo the transurethral resection of the bladder tumor.

Study design: A descriptive study is conducted during the periods of July 29th 2018 to December 25th 2019. The study conducted in Hilla Teaching Hospital and Al’imam Alsadiq Teaching Hospital were the designated site for data collection.

Study Sample: A non-probability “purposive sample” of (51) nurses who are working at surgical wards. The total number of nurses working in surgical department in Hilla Teaching Hospital and Al’imam Alsadiq Teaching Hospital were (76) nurses.(41) nurses in Hilla Teaching Hospital and (35) nurses in Al’imam Alsadiq Teaching Hospital

Study Instrument: To evaluate the effectiveness of education program on nurses knowledge toward management patient with TURBT, the researcher constructed a questionnaire format in order to reach the aims of the study, consisted of (2) parts

Part I: Self-administered questionnaire sheet related to demographic characteristics of the nurses

Part II: Self-administered questionnaire sheet related to nurses knowledge toward management patients with TURBT.

Statistical analysis: The statistical data analysis approach by using (SPSS-ver.20) is used in order to analyze and evaluate the data of the study. A descriptive statistical data analysis approach used to describe the study variables: Frequencies, Percentages, standard deviation, and mean of score. Inferential statistical data analysis approach: used by application of the analysis of variance (ANOVA).

Results

Table (1): Nurses their Demographic Characteristics

Demographic Data	Groups	Study Group		Control Group		Sig Difference		
		Freq.	%	Freq.	%	T-Value	D.F.	P-Value
Age / Years	20 to 25	11	35.5	6	24.0	-0.993	54	0.325 NS
	26 to 31	17	54.8	15	60.0			
	32 to 37	3	9.7	3	12.0			
	38 to 43	0	0	1	4.0			
Gender	Male	17	54.8	17	68.0	0.993	54	0.325 NS
	Female	14	45.2	8	32.0			

Cont... Table (1): Nurses their Demographic Characteristics

Marital Status	Single	6	19.4	3	12.0	-0.735	54	0.465 NS
	Marriage	25	80.6	22	88.0			
Education level	Secondary	11	35.5	9	36.0	0.656	54	0.515 NS
	Institute	11	35.5	12	48.0			
	College	9	29.0	4	16.0			
Years of experience	1 to 5	21	67.7	17	68.0	-0.242	54	0.810 NS
	6 to 11	8	25.8	5	20.0			
	12 to 17	2	6.5	3	12.0			
Years of experience in surgery wards	1 to 5	27	87.1	20	80.0	0.509	54	0.613 NS
	6 to 11	4	12.9	5	20.0			
Training session in nursing in Iraq	No	17	54.8	14	56.0	-0.212	54	0.833 NS
	One	8	25.8	4	16.0			
	Two	3	9.6	5	20.0			
	three	3	9.6	2	8.0			
Duration	No	17	54.8	14	56.0	-0.930	54	0.357 NS
	1 to 15	11	35.4	7	28.0			
	16 to 30	3	9.6	4	16.0			

This table represents the distribution of the nurses their demographic characteristics in term of frequencies and percentage (control versus study). Age of the nurses ranged from 20- 43 years, revealed that the majority 17 (54.8%) of nurses in the study group are within the age (26-31), while 15 (60%) of nurses in the control group, there were somewhat less female nurses (45.2%) than male nurses (54.8%) in the study group and (32%) were female and (68%) nurses male in the control group. The majority of nurses 25 (80.6%) were married in the study group and 22 (88%) were married in the control group. The most common educational education was from a secondary nursing school and institute degree (35.5%) for each degree in the study group, and (48%)

institute degree in the control group. In relation of years of experience in nursing ranged from (1-5) years was 21 (67.7%) in the study group and 17 (68%) in the control group. Most common showed that he years of experience in surgical wards ranged from (1-5) years was 27 (87.1%) in the study group, and 20 (80%) in the control group. Concerning training course in nursing in Iraq 17 (54.8%) of nurses in the study group and 14 (56%) of nurses in control group hadn't training courses in nursing. Most common showed that the duration of training in the study group between (1-15) days was (35.4%), and (28%) in the control group. Statistically, there is no significant deference between study and control groups related age,

gender, educational level, years of experience in nursing, years of experience in surgical wards, and training course in nursing.

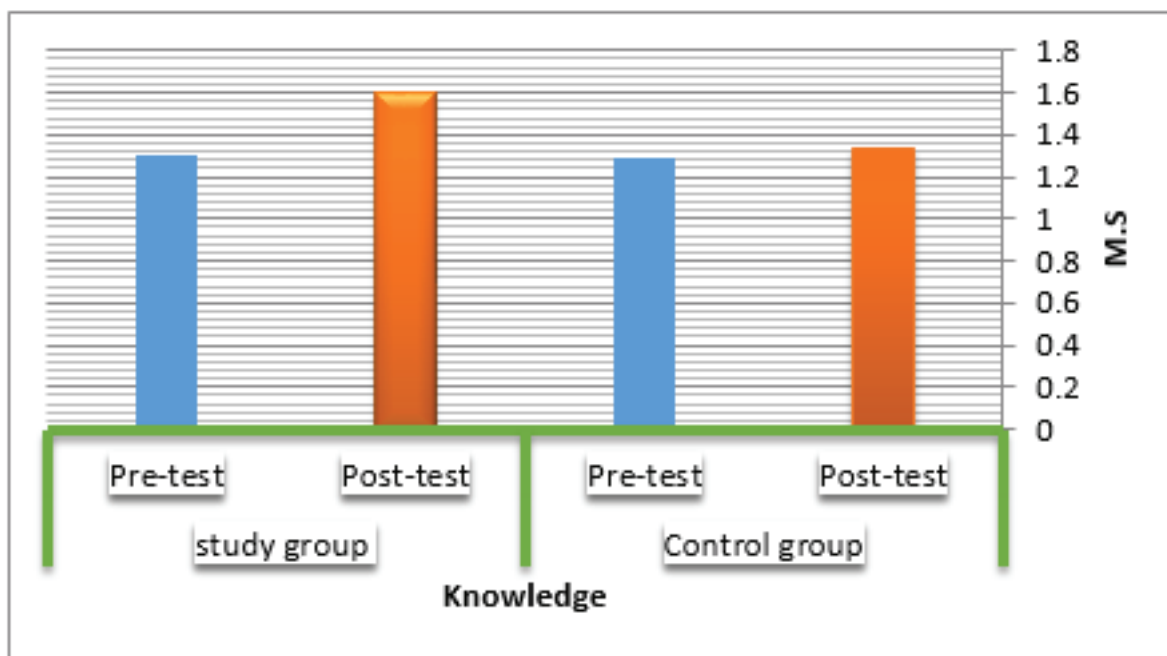


Figure (1): Assessment of control and study groups knowledge in pre-test and post- test

Reveal that score of participants knowledge in the study group has increased from (M.S. 1.3026) in the pretest time to (M.S. 1.6787) in post test time for the control group, this score has slightly increase from pre test (M.S. 1.2985) to post tests (M.S. 1.3343).

Discussion

Nurses Demographic Data

The sample consists of 51 nurses who were purposive allocated to either a control group (n=25) and a study group (n=31). Our findings reveal that the most of nurses in the study and control groups are male, it constituted (54.8% and 68.0%) respectively. As well as, both of study and control groups share a highly range of ages group (26-31) years old, due to the nature of the nursing profession, male nurses were accounted for most of the nursing staff, and all nurses who work in surgical ward need to be young to cover all duties in this units. Also, this may be due to the fact that males cover night duties while females does not.

This results come in the same line with study has been conducted in AL-Jamhuree Teaching Hospital and AL-Salam Teaching Hospital in Nineveh Governorate during the period from 10th September 2013 up to 10th

March 2014.. Their results reported that the age of nurses who work in surgical wards and participated in this study ranged from 20 -29 years was (43.4%) in study group and (46.7%) in the control group. and concerning gender of nurses in study most common male nurses in both study and control group was (56.7%) [10].

Nurses Knowledge

Nurse’s knowledge questionnaire items towards management of patients with transurethral resection of the bladder tumor, which classified in four axis (main domains), such that “ anatomy and physiology of urinary bladder, general information about bladder tumor, TURBT, and complication of TURBT”, using MCQ questionnaire’s items technique which were classify in to two categories responses, such as “ False, and True” along studied (Pre, and Post) periods due to application an educational program for study group, as well as controlled group are chooses for comparisons significant. Results of testing significant with reference of questionnaire’s items are reported mostly highly significant differences at P-value <0.01, which assigned effectiveness of the studied educational program through raising knowledge grades regarding nurse staff in study group, and that be enable to confirms importance or

successfulness of applying the suggested program.

The deficit knowledge pretest in both study and control groups regarding transurethral resection of the bladder tumor might be due to several reasons; the nurses do not develop and update their knowledge continuously, most of nurses who work in health institutions quit book reading so they do not follow up and only indulge in nursing practices, consequently they became unable to remember some information particularly the knowledge that related to transurethral resection.

Our findings come in the same line with effectiveness of educational program on nurses' knowledge regarding pre and post-operative nursing management. Measurement of effectiveness for educational program carried out through the use of knowledge test that include (40) items test-retest. The results of the study show that the effectiveness of educational program about nurses' knowledge regarding pre and post-operative nursing management is positive and evident. It also shows that there is a good development with highly significant differences in study group between pre and post-test in all items related to pre and post-operative nursing management [11].

It is important to note the importance of the nurses' knowledge in the workplace which is confirmed study deals with nursing implications from the operating room to discharge: therapy following transurethral resection of bladder tumors. It's confirmed that oncology nurses, who have a unique knowledge of safe handling and patient care, can improve staff safety and patient outcomes in several areas of healthcare organizations, as well as reduce the mortality and morbidity of urinary bladder cancer by learning more about the disease and intravesical antineoplastic therapy [12].

Also, a narrative review in caring for patients with prostate cancer, they emphasized that nursing knowledge in care procedures for men with prostate cancer should begin at the time of diagnosis, when patients should participate in determining the best course of treatment. During the period of prostatectomy, care includes preoperative preparation, which is essential to achieve healing and adaptation to postoperative sequelae. Its concludes that the role of a clinical nursing specialist in the care of men with prostate cancer is broad and necessary, but new interventions and strategies for care need to be knowledge development assessment in a continuously through well-designed clinical studies [13].

In another manual, a cross-sectional study has been aimed at identification of nursing actions in the preoperative period and in preparing prostatectomy patients. Has been identified weaknesses in care delivery for prostatectomy patients, particularly in nurses education, nurses knowledge or education in those area very important [14].

Moreover, a descriptive cross sectional study was conducted among nurses in private tertiary care hospital Peshawar. The study result was alarming to know that the nurses had low knowledge, and poor practices about infection control in the use of urethral catheter. This indicates that nurses need to be educated and trained more on infection control in the use of urethral catheter [15].

Conclusions

There were improving in nurses' knowledge after post-test for study group for educational program concerning management of patients with transurethral resection of the bladder tumor. While control group did not present any improvement in their knowledge concerning management of patients with transurethral resection of the bladder tumor at pre and post-test. It is need to be encouraging nurses to be enrolled in training sessions to improve their knowledge to keep them up to date toward management of patients with transurethral resection of the bladder tumor.

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Conflict of Interest: None to declare.

Ethical Clearance: All experimental protocols were approved under the Baghdad University- Iraq and all experiments were carried out in accordance with approved guidelines.

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