Effectiveness of an educational program on Nurses' Practices toward Nursing Management of Patients with Transurethral Resection of the Bladder Tumor in Hilla Teaching Hospitals

فاعلية البرنامج التعليمي في ممارسات الممرضين المتعلقة بالتدابير التمريضية لمرضى استئصال ورم المثانة عبر الإحليل في مستشفيات مدينة الحلة التعليمية

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الخلاصة:

خلفية البحث: علاج الخط الأول القياسي لسرطان المثانة المنتشر غير العضلي هو استئصال ورم المثانة عبر الإحليل، يتبعه تقطير العلاج الكيميائي داخل المثانة. الهدف من استئصال ورم المثانة عبر الإحليل هو اجراء تشخيص صحيح وإزالة جميع الاضرار المرئية. نشرت العديد من المنظمات تقارير حول أهمية فهم كادر التمريض لعملية المرض والعلاجات التي تؤدي الى تحسين جودة الرعاية. يعد تحسين عملية الممارسة أمراً مهماً للممرضين لأنه يحسن العملية التمريضية، مما يؤدي الى تحسن نتائج المرضى.

الأهداف: الدراسة الحالية تهدف الى تقييم العناية التمريضية المقدمة لمرضى استئصال ورم المثانة عبر الإحليل، ولتقييم فاعلية البرنامج المقدم للممرضين في تحسين أداءهم التمريضي.

المنهجية: تم تطبيق دراسة شبه تجريبية اعتمدت الاختبار القبلي والبعدي. وتم إجراء البحث في مستشفى الحلة التعليمي ومستشفى الإمام الصادق التعليمي في مدينة الحلة، واستمرت هذه الدراسة للمدة من ٢٩ / تموز / ٢٠١٨ الى ٢٥ / كانون الأول / ٢٠١٩. تم إختيار عينة عمدية مؤلف من ٥٦ ممرض/ة من العاملين في وحدات الجراحة في المستشفيين المذكورين أعلاه. بعد تطبيق البرنامج التعليمي على الممرضين والممرضات المشاركين في الدراسة لمدة (شهر ١) تم استعمال استبانة مؤلفة من عدة أسئلة لتقييم مدى تأثير هذا البرنامج التعليمي على ممارسات الممرضين والممرضات الذين يقومون بالعناية بالمرضى الخاضعين حديثاً لعمليات إستئصال ورم المثانة عبر الإحليل. وتم عرض الاستبانة والبرنامج التعلمي على خبراء في الاختصاص لإيجاد صدق الاستبانة، وتم تحليل النتائج من خلال إجراء تحليل إحصائي وصفي واستنتاجي.

النتائج: أشارت نتائج الدراسة بأن البرنامج التعليمي كان موثرا في ممارسات الممرضين المتعلقة بالعناية التمريضية.

الاستنتاج: لقد تحسنت ممارسات الممرضين في مجموعة الدراسة بشكل ملحوظ بعد تطبيق البرنامج التعليمي عنها قبل تطبيق هذا البرنامج. كذلك فإن ممارسة الممرضين في مجموعة الدراسة إثناء العناية بالمرضى الذين خضعوا حديثاً لعمليات إستئصال ورم المثانة عبر الإحليل قد تحسنت بصورة ملحوظة بالمقارنة مع مجموعة السيطرة بعد تطبيق البرنامج التعليمي عليهم، فيما بقيت ممارسات مجموعة السيطرة نفسها إثناء الدراسة.

التوصيات: تشجيع الممرضين والممرضات على المشاركة في البرامج التدريبية لرفع مستوى الممارسات لديهم وإبقائهم على تواصل مع آخر المستجدات والتوصيات بخصوص العناية بالمرضى الخاضعين حديثاً لعملية إستئصال ورم المثانة عبر الإحليل.

الكلمات المفتاحية: البرنامج التعليمي، ممارسة، استئصال ورم المثانة.

ABSTRACT:

Background: the standard first-line treatment for non-muscle invasive bladder cancer is transurethral resection of bladder tumor (TURBT), followed by instillation of intravesical chemotherapy. The goal of TURBT is to make a correct diagnosis and to remove all visible lesions. Several organizations have published reports on the importance of nursing staff understanding disease process and treatments leading to an improvement in quality of care. Improving the practice process is important to nursing as it improves nursing process, which improves patient outcomes.

Aims of the study: To assessing nurses' practices regarding management of patients with transurethral resection of the bladder tumor. And determine the effectiveness of the educational program on nurses' practices concerning management of patients with transurethral resection of the bladder tumor.

Methodology: A semi-empirical study was applied that adopted the pre and posttest. The research was conducted in Al-Hilla Teaching Hospital and Al-Imam Al-Sadiq Teaching Hospital in Al-Hilla, and this study continued for the period from 29 \ July \ 2018 to 25 \ December \ 2019. A deliberate sample of 56 nurses from the surgical units of the two aforementioned hospitals was selected. After applying the educational program to the male and female nurses participating in the study for a period of (1 month), a questionnaire consisting of several questions was distributed to assess the extent of the impact of this educational program on the practices of male and female nurses who care for patients who are newly subjected to urethritis. The questionnaire and the educational program were presented to experts in the field to find the truth of the questionnaire. The data were analyzed through a descriptive and deductive statistical analysis.

Results: The results indicated that the educational program was effective in raising the practices of the nurses participating in the study, which contributed to improving their practices during the care of patients undergoing recent TURBT, and therefore the results confirmed that the educational program was successful and could be used in the workplace.

Conclusion: There were improving in nurses' practices 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 practices concerning management of patients with transurethral resection of the bladder tumor at pre and posttest.

Recommendations: Encouraging nurses to be enrolled in training sessions to improve their practices to keep them up to date toward management of patients with transurethral resection of the bladder tumor.

Keywords: Instructional Program, practice, Transurethral Resection.

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INTRODUCTION

Bladder cancer is the fourth most common malignant tumors in men and increases the incidence of bladder tumors in the industrialized and developed countries [(1)]. The incidence rate of cancer defined as the number of new diagnosed cases per 100,000 people per year. Bladder cancer is the most common malignant tumor in the urinary tract. Bladder cancer is nearly three times more common in more men than women [(2)]. The worldwide age standardized incidence rate (ASR) is 10.1 per 100,000 for men and 2.5 per 100,000 for women [(3)]. In men, it is the fourth most common type of cancer after prostate cancer, lung, colon and rectum, which represents 6.6% of all cancer cases. In women it is the ninth most common cancer, accounting for 2.4% of all types of cancer [(2)]. In Europe, it has been reported the highest rate of injury (ASR) in the western regions (23.6 in men and 5.4 in women) and South (27.1 in men and 4.1 in women), followed by Northern Europe (16.9 in men and 4.9 in women). The lowest rate was observed in the countries of Eastern Europe (14.7 in men and 2.2 in women) [(4)].

Transurethral resection of bladder tumor (TURBT) it's one of the most urinary tract operations laparoscopic. This is the initial intervention required for bladder cancer. TURBT is important for the diagnosis and staging, the goal is to achieve complete eradication of the tumor when possible [(5)]. TURBT is the removal of abnormal tissue (tumor) of the bladder. Tissue is removed by passing a special tool in the urethra. This device has a light and a telescope to watch the bladder and a special electrode cut bladder tissue. Period after stretching surgery from the time when the patient comes out of the operating room (OR) and ends with assessing the follow-up in the clinical situation or at home, including nursing care for the patient in the hospital in the medical surgical unit general to continue to help the patient recover from the effects of anesthesia, and assess the situation of physiological the patient frequently, control complications, and pain management and implementation of measures designed to achieve the goals of long-term independence through self-care, therapeutic and successful management of the system, and out to the house and full recovery [(6)]. After the patient's return to a nursing inpatient, supplemented by a preliminary assessment of the nurse continues to monitor the signs and symptoms of urinary settlement. Nursing interventions include postoperative evaluation of urinary catheters for the loss of patency and blood every hour to two hours. At first, you may see the nurse Paula red color fading to pink within 24 hours. The nurse monitors the excessive loss of blood markers, for example, rapid pulse and low blood pressure, check the intake and output every hour to two hours [(7)].

AIMS OF THE STUDY:

To assessing nurses' practices regarding management of patients with transurethral resection of the bladder tumor, and determine the effectiveness of the educational program on nurses' practices concerning management of patients with transurethral resection of the bladder tumor.

METHODOLOGY

A quasi-experimental design (pre-posttest approach) was conducted in Hilla Teaching Hospital Al'imam Alsadiq Teaching Hospital. This study was conducted during the period of July 29th 2018 to December 25th 2019. A non-probability "purposive sample" of (56) 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. A questionnaire instructional to evaluate the effectiveness of education program on nurse's practices toward management of patients with TURBT, The questionnaire and content validity was carried out through the 18 experts. Descriptive and inferential statistical analyses were used to analyze the data. The questionnaire is comprised of two parts.

The researcher constructed a questionnaire format in order to reach the aims of the study, which consisted of (2) parts:

Part I: Self-administered questionnaire sheet related to demographic characteristics of the nurses which consisted of (8): age, gender, marital status, education level, years of experience in nursing and surgery wards, and training course.

Part II: Self-administered questionnaire sheet related to nurses practices toward management of patients with TURBT. Which consisted of (78) multiple choice questions divided into (2) parts; which are preparation patient for surgery and composed of (9) items, and patient management after operation which composed of (69) items. Reliability of questionnaire is measure through the use pretest-posttest approach and computing of correlation coefficients (r=0.87). For the internal scale and content validity is determined through panel of experts. Data are collected through the use of the constructed questionnaire and the interview technique as a means of data collection. Descriptive and inferential statistical analyses were used to analyze the data. which includes frequency, percentage, mean of scores, and standard deviation; and inferential statistical data analysis approach which includes mean score, T-test and analysis of variance (ANOVA) by using the statistical package of social science (SPSS) version (20)at (P-value ≤ 0.05).

RESULTS:

Table (1): Nurses their Demographic Characteristics

Demographic Data	Groups	Study Group		Control Group		Sig Difference		
		Freq.	%	Freq.	%	T-Value	df	p≤0.05
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			
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 according to demographic characteristics (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.

Table (2): Statistical Difference between Study and Control Groups regarding Pre-test Scores

Pre-test	**Study group**				**Control group**				
Rating	**Freq.**	**%**	**MS**	**SD**	**Rating**	**Freq.**	**%**	**MS**	**SD**
Never	**31**	**100**	**1.2731**	**0.066**	**Never**	**25**	**100**	**1.2731**	**0.066**
Sometime	**0**	**0**			**Sometime**	**0**	**0**		
Always	**0**	**0**			**Always**	**0**	**0**		
t-value –(22.814), d.f. (54), p-value (0.000) NS									

cut of point = 0.66) , (SD) (A) always(mean) = 1 to 1.66 , (S) sometime (mean) = 1.67 to 2.33 (N) never (mean) = 2.34 to 3, (S.D) stander deviation,(Ns): Non-significant (S): significant, (T value): t-test, (D f): degree of freedom

Table 2 showed there are no significant differences between study and control group at pretest related to nurses practice when analyzed by student (t-test)

Table (3): Statistical Difference between Study and Control Groups regarding Post-Test Scores

Post-test	**Study group**				**Control group**				
Rating	**Freq.**	**%**	**MS**	**SD**	**Rating**	**Freq.**	**%**	**MS**	**SD**
Never	**0**	**0**	**2.1298**	**0.04158**	**Never**	**25**	**100**	**1.2874**	**0.06443**
Sometime	**31**	**100**			**Sometime**	**0**	**0**		
Always	**0**	**0**			**Always**	**0**	**0**		
t-value (-135.615-), d.f. (48), p-value (0.000) HS									

(cut of point = 0.66) , (SD) (A) always(mean) = 1 to 1.66 , (S) sometime (mean) = 1.67 to 2.33 (N) never (mean) = 2.34 to 3, (SD) stander deviation,(Ns): Non-significant (S): significant, (T value): t-test, (D f): degree of freedom

Table 3 showed there are significant differences between study and control group at post test score related to nurses practices when analyzed by (t-test).

Table (4): Association between the overall Evaluation at Post (Study Group) test and their Demographic Data

Demographic Data		d.f	Mean Square	F	p≤0.05
Gender	Between Groups	13	.175	0.552	0.859 NS
	Within Groups	17	.318		
	Total	30			
Age	Between Groups	13	7.967	0.658	0.775 NS
	Within Groups	17	12.109		
	Total	30			
Level of education	Between Groups	13	0.648	0.962	0.520 NS
	Within Groups	17	0.674		
	Total	30			
Marital Status	Between Groups	13	0.095	0.450	0.925 NS
	Within Groups	17	0.212		
	Total	30			
Experience	Between Groups	13	6.694	0.591	0.830 NS
	Within Groups	17	11.332		
	Total	30			
Experience in surgical ward	Between Groups	13	4.437	0.940	0.537 NS
	Within Groups	17	4.721		
	Total	30			
Number in Iraq	Between Groups	13	0.972	0.955	0.525 NS
	Within Groups	17	1.018		
	Total	30			
Duration	Between Groups	13	40.783	0.798	0.656 NS
	Within Groups	17	51.135		
	Total	30			

This table shows that there is no statistical significant between demographic data of study sample and their practice at (post-test) educational program follow up p-value >0.05. The educational program when analyzed by ANOVA test.

Table (5): Association between the overall Evaluation at Post (control Group) test and their Demographic Data

Demographic Data		d.f	Mean Square	F	Sig.
Gender	Between Groups	14	0.174	0.581	0.829 NS
	Within Groups	10	0.300		
	Total	24			
Age	Between Groups	14	10.776	0.537	0.860 NS
	Within Groups	10	20.050		
	Total	24			
Level of education	Between Groups	14	0.512	1.059	0.475 NS
	Within Groups	10	0.483		
	Total	24			
Marital Status	Between Groups	14	0.058	0.314	0.976 NS
	Within Groups	10	0.183		
	Total	24			
Experience	Between Groups	14	11.091	0.478	0.900 NS
	Within Groups	10	23.217		
	Total	24			

Experience in surgical ward	**Between Groups**	**14**	**6.334**	**0.614**	**0.804 NS**
	Within Groups	**10**	**10.317**		
	Total	**24**			
Number in Iraq	**Between Groups**	**14**	**0.762**	**0.497**	**0.888 NS**
	Within Groups	**10**	**1.533**		
	Total	**24**			
Duration	**Between Groups**	**14**	**72.572**	**0.598**	**0.816 NS**
	Within Groups	**10**	**121.383**		
	Total	**24**			

This table shows that there is no statistical significant between demographic data of control sample and their practice at (Post-test) educational program follow up p-value >0.05. The educational program when analyzed by ANOVA test.

DISCUSSION

The sample consists of 56 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, 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 word 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 do not. A 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%) [(8)].

The study has been conducted an effectiveness of educational program on nurses' knowledge regarding pre and post-operative nursing management in AL-Najaf AL-Ashraf City. Their results confirmed most common nurses in their study was male in study group (55%) and (65%) in control group [(9)].

The majority of nurses (80.6%) were married in the study group and (88%) were married in the control group. This result comes because most of these age groups are the age of marriage, especially after the completion of the study and appointment in the field of nursing. Where the Iraqi young after graduating from the study and the presence of employment opportunity take the side of marriage, on other hand, single nurses do not have any other interests or attitudes; they are more interested in their job this results consistent with study deals with the knowledge of nurses regarding urinary catheterization impact the protocol of care. The findings depicts that most of nurses were married, it composed (40%) out total number of the study sample [(10)].

Relative to their educational attainment, most of the nurses in study and control groups were nursing institute graduated, it composed (53.5% and 48%) respectively out total number of the study sample, as being the diploma degree were considered the major proportion of staff nurses in health organization, due to the large number of institutions that graduate such degrees. Also, this result come because of the hospital wards are totally depends on nurses who graduated from nursing institute and nursing secondary school while nurses who graduated from nursing college are allocated in special units as well as they are still in small number compared to other nurses. many previous studies were in agreement with this result, it consisting with study as mentioned above, it confirmed that nursing institute degree were

dominantly in study group (40%), but in control group most common graduated from nursing secondary school (40%) [11].

As well as the study that conducted at Kerman city in east of Iran, assessed knowledge, attitude, and performance of nurses toward hand hygiene in hospitals; they found that the majority of study samples graduated from nursing institute [12].

Regarding the study population their years of experience, our findings depicts that a high percent of the nurses in the study group (67.7%) and control group (68%) were have (1-5) years experiences in the job. As well as, the same duration of experience in the surgical words, this results com because the leaving a job in surgical department to go into the nursing assistant field in the office due to very heavy work, and they must have the proper training to do the work. Or; the few years of nursing experience in surgical wards could be explained by the fact that has a frequent rotating from one unit to another within the hospital. On the other hand, result takes place because when the nurses are young they will have a greater desire to develop their information than nurses who are included in higher age group. This result is match with the result a quasi-experimental (pre-posttest) study with application of pre-posttest approach for both studied and controlled groups during the period from November 1st 2015 to May 1st 2016, in Medical City at AL-Najaf city. The results reported that the higher percentage for both study and control groups are between (1-3) years of experience [13].

It is obvious among our findings, showed that the (54.8%) of nurses in study group and (56%) of nurses in control group did not attend any training session and or conferences regarding knowledge and practice related to management of patient in surgical department. This result reflects the need of education regarding transurethral resection of the bladder tumor. These results agree with quasi-experimental deals with indwelling urinary catheter management. Results declared that none of the nurses attended any training courses regarding urinary catheters management [14].

Nurse's Practice questionnaire items towards management of patients with transurethral resection of the bladder tumor, which classified in six axis (main domains), such that " preparation patient for the surgery, patient management after operation, care patients with catheterization, bladder irrigation, instruction when the catheter is removed after remove of catheter teach patient about, and instruction about daily activity saving using checklist observation which were classify in to three categories responses, such as "Always, Sometime, and Never" 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 practices grades regarding nurse staff in study group, and that be enable to confirms importance or successfulness of applying the suggested program.

A study has been conducted in Egypt, deals with knowledge of nurses towards urinary incontinence. A descriptive research design was conducted in Urology Departments of Urology and Nephrology Center at Mansoura University Hospital, Egypt over a period of six months. The findings depicts the majority of nurses had inadequate knowledge and practice regarding the management of post prostatectomy urinary incontinence patients. None of the studied nurses perform bladder training program for post prostatectomy patients. Discharge and follow-up nursing management were neglected issue and should be emphasized. It has been need the educational programs depending on where they work [15].

Also, our results agreement with the finding obtained from kings wood (2012) [16], who has mentioned that education programs have been designed to keep nurses with current practice and trends. The researcher confirms that the nurses in the control group are not changed in pre and posttest. This is an agreement with Margo (2012) [17], whose state that a nurse does not participate in continuing education opportunities, it will not be able to renew

her license to practices medicine. Carl and Sally (2011) [18], emphasize the educational program to help the nurse enhance and develop skills and information.

Findings shows that there is no statistical significant between demographic data of study sample and their practice at (post-test) educational program follow up p-value >0.05. The educational program when analyzed by ANOVA test. Findings depicts that there is no statistical significant between demographic data of control sample and their practice at (Post-test) educational program follow up p-value >0.05. The educational program when analyzed by ANOVA test. Find that there is no significant difference between knowledge and practice of nurses with the level of education [19].

CONCLUSIONS

There were nurse's practices in terms of management of patients with transurethral resection of the bladder tumor, nurses were poor experiences. There were no differences between the nurses practices in both study and control groups in the pretest. There were improving in nurses' practices 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 practices concerning management of patients with transurethral resection of the bladder tumor at pre and post-test, Nurses their gender, age, educational attainment, marital status, experience in and out surgical wards, number and duration of training have been not influence their practices.

RECOMMENDATION

Encouraging nurses to be enrolled in training sessions to improve their knowledge and practice to keep them up to date toward management of patients with transurethral resection of the bladder tumor, reassessment and follow-up for nurses need to be applied after education session to monitor, evaluate and to promote their practice to ensure their application in job. Health directorate need to be providing equipment and facilities in surgical wards to implementation of professional nursing practice.

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