

A STUDY TO ASSESS THE EFFECTIVENESS OF PLANNED TEACHING PROGRAM ON KNOWLEDGE REGARDING PREVENTION OF URINARY TRACT INFECTION IN PATIENTS WITH INDWELLING CATHETER AMONG STAFF NURSES IN SELECTED HOSPITAL IN KANPUR, UTTAR PRADESH.

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ABSTRACT:

Background: Preventing the catheter associated urinary tract infections is key standard to regulate the quality of nursing care, and aim of this research is to provide knowledge regarding indwelling catheter care that will help in the implementation of the quality of nursing care, eventually it will lead to better results. The Present study is a quasi experimental study to assess the effectiveness of planned teaching programme on knowledge regarding indwelling catheter care among staff nurses in selected hospital of Kanpur, Uttar Pradesh. **Method:** A quasi-experimental study was conducted among 86 participants, selected by non probability convenient sampling method. Demographic Performa and self-structured questionnaire were used to collect the data from the staff nurses in selected hospital of Kanpur, Uttar Pradesh. **Result:** The finding of the study shown that in pre test majority 61(71%) had moderate knowledge, 24(28%) had inadequate knowledge and 1(1%) had adequate knowledge. Post test reveals that majority 71(83%) had adequate knowledge, 15(17%) had moderate knowledge. The mean score of pre test was (13±3.23) and post test mean score was (24±4.41), obtained 't' value was 25.23. Chi square shown that there was no significant relationship between the post test levels of knowledge with their Age, Gender, Religion, Marital status, Educational status, Area of working and exposure to workshop. **Conclusion:** The study concluded that the level of knowledge was improved after administration of planned teaching programmed. Thus planned teaching programmed is an effective strategy which can help in improving the level of knowledge regarding indwelling catheter care among staff nurses in selected hospital of Kanpur, Uttar Pradesh.

Key words: Urinary tract infection, plan teaching programme, Indwelling catheter, knowledge, effectiveness

INTRODUCTION:

Only aseptic conditions should be used for the invasive procedure of inserting an indwelling urethral catheter. Inserting an indwelling urethral catheter is an invasive procedure that should only be carried out aseptically by a physician or nurse. Because catheterization of the urinary system poses a risk of infection, it should only be done when there is a particular and appropriate clinical rationale.¹ Suprapubic indwelling catheters and transurethral indwelling catheters are the two most common forms of indwelling catheters. The suprapubic indwelling catheter is used for bladder drainage as well as urethral and pelvic surgery, as well as in the case of genitourinary damage. Because the surgery is arranged and supervised by the nurses, the transurethral indwelling catheter is a usual strategy. Urine incontinence and urinary retention are two frequent bladder dysfunctions for which the catheter is used.² A urinary catheter, which is a tube put into the bladder through the urethra to drain urine, is related with around 75% of UTIs acquired in the hospital. Urinary catheters are used by 15-25 percent of hospitalized patients during their stay. Prolonged usage of the urinary catheter is the most major risk factor for developing a catheter-associated urinary tract infection. As a result, catheters should only be used when absolutely necessary and should be removed as soon as possible.³ Catheter care is normally done twice a day or as needed in clinical practice. Insufficient evidence to advocate daily or twice-day washing with soap and water or povidone-iodine solution, according to the Centers for Disease Control and Prevention guidelines.⁴

OBJECTIVES OF THE STUDY :

- To assess the existing knowledge level regarding prevention of urinary tract infection in patients with indwelling catheter among staff nurses.
- To assess effectiveness of planned teaching programme on knowledge regarding prevention of urinary tract infection in patients with indwelling catheter among staff nurses.
- To find out the association between the post test level of knowledge with their selected demographic variables.

HYPOTHESIS :

H1: There is a significant difference between pre test and post test level of knowledge scores regarding prevention of urinary tract infection in patients with indwelling catheter among staff nurses.

H2: There is a significant association between post test level of knowledge scores among staff nurse with their selected demographic variables.

MATERIALS AND METHODS :

Quantitative quasi experimental research design with one group pre-test and post-test research design was used in this study. The study was conducted at selected Hospital in Kanpur, Uttar Pradesh. 86 staff nurse (n=60) were selected by using non probability convenient sampling technique. Self structured questionnaire was developed to collect socio demographic data and knowledge on prevention of urinary tract infection in patients with indwelling catheter. It comprises of 30 multiple choice questions regarding prevention of urinary tract infection. Each question carries four options, each correct answer was given a score of “1” and “0” for wrong answer. Thus, a total of 30 marks were allotted for 30 items.

RESULTS :

The collected data were analyzed by using inferential and descriptive statistics.

TABLE 1: FREQUENCY AND PERCENTAGE DISTRIBUTION OF SAMPLES ACCORDING TO THEIR DEMOGRAPHIC DATA

(n=86)

Sl. No	Selected Demographic variables	Frequency (f)	Percentage (%)
1.	Age in years		
	a) ≤ 22	34	40
	b) 23 to 27	47	55
	c) 28 and above	5	5
2.	Gender		
	a) Male	7	8
	b) Female	79	92
3.	Religion		
	a) Hindu	64	75
	b) Christen	20	23
	c) Muslim	2	2

4.	Marital status a) Married b) Single c) Widow / Divorced	77 9 0	90 10 0
5.	Educational status a) GNM b) B.Sc Nursing c) P.B.S.C Nursing / M.Sc Nursing	25 52 09	29 61 10
6.	Area of working in staff nurse a) Emergency / Casualty b) ICUs c) Wards	12 25 49	14 29 57
7.	Do you have exposure to workshop / CNE programe on prevention of Urinary tract infection a) Yes b) No	0 86	0 100

Table No 1 describe the socio demographic, Majority 47(55%) of staff nurse were in the age group of 23 to 27 years. Majority 79(92%) were females. Majority 77(90%) of staff nurse were married. Majority 52(61%) in B.Sc Nursing. Majority 49(57%) staff nurse worked in wards.

TABLE 2: FREQUENCY AND PERCENTAGE DISTRIBUTION OF SAMPLE ACCORDING TO PRE TEST AND POST TEST LEVELS OF KNOWLEDGE

(n=86)

SL. NO	KNOWLEDGE ON MANAGEMENT OF HYPOGLYCEMIA	LEVEL OF KNOWLEDGE					
		INADEQUTE (1-33%)		MODERATE (34-66%)		ADEQUATE (>67%)	
		f	%	F	%	f	%
1	PRE TEST	24	28	61	71	1	1
2	POST TEST	0	0	15	17	71	83

Table No 2 Pretest level of knowledge regarding prevention of urinary tract infection in patients with indwelling catheter among staff nurses in selected Hospitals reveals that majority 61(71%) had moderate knowledge, 24(28%) had inadequate knowledge and 1(1%) had adequate knowledge. Post test reveals that majority 71(83%) had adequate knowledge, 15(17%) had moderate knowledge.

TABLE 3: DIFFERENCE BETWEEN PRE TEST AND POST TEST LEVEL OF KNOWLEDGE

(n = 86)

S.No	Category	Mean	Standard deviation	Mean difference	Paired 't' test		p Value	Inference
					Cal value	tab value		
1	Pre test knowledge	13	3.23	11	25.23	2.00	0.0001	P<0.05
2	Post test knowledge	24	4.41					

Table No 3 shows that the obtained post test mean value (24 ± 4.41) of knowledge was higher than the knowledge of pre test value (13 ± 3.23) respectively. The mean difference was 9. The obtained calculated "t" value was 25.23, which is greater than the tabulated value i.e., 2.00, "p" value 0.0001. It shows that there was significant difference between pretest and posttest knowledge. Thus, indicating planned teaching programme was highly effective. Hence H₁, There is a significant difference between pre-test and post-test knowledge scores regarding prevention of urinary tract infection in patients with indwelling catheter among staff nurses was accepted.

TABLE 4: ASSOCIATION BETWEEN POST TEST LEVELS OF KNOWLEDGE WITH THEIR SELECTED DEMOGRAPHIC DATA

(n = 86)

S.No	Demographic Variables	LEVEL OF KNOWLEDGE			Chi-square χ^2		df	Inference
		Inadequate	Moderate	Adequate	Cal. value	Tab value		
1	Age in years							
	a) ≤ 22	13	21	0				
	b) 23 - 27	10	36	1	3.65	9.49	4	NS
	c) 28 and above	1	4	0				
2	Gender							
	a) Male	2	5	0	0.93	5.99	2	NS
	b) Female	22	56	1				
3	Religion							
	a) Hindu	16	47	1				
	b) Christian	7	13	0	1.52	9.49	4	NS
	c) Muslim	1	1	0				
4	Marital status							
	a) Married	22	54	1				
	b) Single	2	7	0	0.41	5.99	2	NS
	c) Widow/ Divorced	0	0	0				
5	Educational status							
	a) GNM	13	21	0				
	b) B.Sc Nursing	11	32	0				
	c) PBSC Nursing/ M.Sc Nursing	0	8	1	7.27	9.49	4	NS
6	Area of working							
	a) Emergency/ Casualty	9	3	0				
	b) ICUs	4	20	1	3.62	9.49	4	NS
	c) Wards	11	39	0				
7	Exposure to workshop							
	a) Yes	0	0	0				
	b) No	24	61	1	0.44	5.99	2	NS

Table No 4 reveals that in order to find out the association between the post test levels of knowledge with demographic variables, chi square was computed. The results showed that there is no significant relationship between the post test levels of knowledge with their Age,

Gender, Religion, Marital status, Educational status, area of working and exposure to workshop or CNE program. Hence H₂ there is a significant association between post test levels of knowledge with their selected demographic variables was rejected.

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