



Outcome of Nursing Intervention Guidelines on Knowledge and Practice Regarding Preventive Measures of Urinary Tract Infection in Patient With Indwelling Catheter Among Internship Nursing Students

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ABSTRACT

A urinary tract infection (UTI) is a bacterial infection that affects any part of the urinary tract. The main causative agent is Escherichia coli. Although urine contains a variety of fluids, salts, and waste products, it usually does not have bacteria in it. When bacteria get into the bladder or kidney and multiply in the urine, they cause a UTI. Urinary tract infection is an important cause of morbidity and mortality in Indian subjects, affecting all age groups across the life span. Though Escherichia coli, which is normally present in the gastrointestinal tract, is the commonest causative organism, other gram negative colonic bacteria have been gaining prominence in India over the last two decades. Because of the proximity of the gut to the urinary tract, these organisms ascend through the urinary passage to the urinary bladder and the kidneys to produce infection. **OBJECTIVES OF THE STUDY:** 1. To assess the existing knowledge score regarding preventive measures of urinary tract infection in patients with indwelling catheter among nursing students. 2. To assess the existing practice score regarding preventive measures of urinary tract infection in patients with indwelling catheter among nursing students. 3. To Develop and implement of nursing intervention guidelines regarding preventive measures of urinary tract infection in patients with indwelling catheter. 4. To assess the outcome of knowledge scores regarding preventive measures of urinary tract infection in patients with indwelling catheter among nursing students. 5. To assess the outcome of practice scores regarding preventive measures of urinary tract infection in patients with indwelling catheter among nursing students. 6. To find an association between pretest knowledge scores of nursing students with their socio-demographic variables. **MATERIAL AND METHOD:** In this research study an evaluative research approach with pre-experimental design is used. Non-probability convenience sampling technique was used to select the 60 samples of internship nursing students and data collection was done. Data was analyzed by using descriptive and inferential statistics such as standard deviation, chi-test, and paired 't' test. **Table. RESULT:** In the pretest conducted among 60 subjects, none had good knowledge score. In the post test, 80% had excellent knowledge score on care of preventive measures of UTI after administration of nursing guidelines. In the pretest conducted among 60 subjects, none had good practice score. In the post test, 80% had good practice score on catheter care after administration of nursing guidelines. There was significant increase in posttest knowledge scores through nursing guidelines. Here only one demographic variable significant with the professional qualification and other demographic variable were not significant with association on preventive measures of UTI with indwelling catheter care. This association done used with chi-square test at significant level of $p < 0.05$. **DISCUSSION:** In this research study findings revealed that nursing guidelines is highly effective in improving knowledge and practice of internship nursing students regarding preventive measures of urinary tract infection in patients with indwelling catheter.

KEYWORDS

Outcome, Indwelling catheter, Care of preventive measures of UTI, nursing guidelines, Internship Nursing Students.

INTRODUCTION

"Prevention is better than cure."
- Desiderius Erasmus

The urinary system consists of the kidneys, ureters, bladder, and urethra. The key elements in the system are the kidneys, a pair of purplish-brown organs located below the ribs toward the middle of the back. The kidneys remove excess liquid and wastes from the blood in the form of urine, keep a stable balance of salts and other substances in the blood, and produce a hormone that aids the formation of red blood cells. Narrow tubes called ureters carry urine from the kidneys to the bladder, a sac-like organ in the lower abdomen. Urine is stored in the bladder and emptied through the urethra.

Urinary tract infections are a serious health problem affecting millions of people each year. Infections of the urinary tract are the second most common type of infection in the body. Urinary tract infections (UTIs) account for about 8.3 million doctor visits each year. Women are especially prone to UTIs for reasons that are not yet well understood. One woman in five develops a UTI during her lifetime. UTIs in men are not as common as in women but can be very serious when they do occur.²

NEED FOR THE STUDY

Urinary tract infection is an important cause of morbidity and mortality in Indian subjects, affecting all age groups across the life span. Though Escherichia coli, which is normally present in the gastrointestinal tract, is the commonest causative organism, other gram negative colonic bacteria have been gaining prominence in India over the last two decades. Because of the proximity of the gut to the urinary tract, these organisms ascend through the urinary passage to the urinary bladder and the kidneys to produce infection.¹²

OBJECTIVES OF THE STUDY:

1. To assess the existing knowledge score regarding preventive measures of urinary tract infection in patients with indwelling catheter among nursing students.
2. To assess the existing practice score regarding preventive measures of urinary tract infection in patients with indwelling catheter among nursing students.
3. To Develop and implement of nursing intervention guidelines regarding preventive measures of urinary tract infection in patients with indwelling catheter.
4. To assess the outcome of knowledge scores regarding

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5. To assess the outcome of practice scores preventive measures of urinary tract infection in patients with indwelling catheter among nursing students.
 6. To find an association between pretest knowledge scores of nursing students with their socio-demographic variables.

RESEARCH HYPOTHESES

- **H₁**- There will be significant difference in pretest and posttest knowledge level of internship nursing students on preventive measures of urinary tract infection among patients with indwelling catheter.
- **H₂**: There will be significant difference in pretest and posttest practice level of internship nursing students on preventive measures of urinary tract infection among patients with indwelling catheter.
- **H₃**: There will be significant association between pretest, knowledge scores of internship nursing students with their socio-demographic variables.

ASSUMPTIONS:-

It is assumed that nursing students may have limited knowledge on prevention of UTI.

Research design

One group pre-test post-test design (Pre experimental Study)

Research setting

-The research setting is Dhiraj general hospital baroda.

Population

Target Population: Internship nursing students

Sampling Technique

Non probability Convenience sampling technique

Sample Size

60 Students

Method of data collection

Structured self-administered questionnaire and Self modified check list.

Analysis and Interpretation

Descriptive and inferential statistics

Sampling criteria

Inclusion criteria

1. Internship nursing students studying in the nursing colleges of vadodara district.
2. Present during data collection.

Exclusion criteria

1. Who will absent during pre-test, or post-test.
2. Unable to follow the instructions.

Description of tool:

Self-Administered questions consist of III sections

Section A Socio demographic variables

This section consists of 8 items on socio demographic variables of internship nursing students such as Age, Gender, Residential area, professional qualification. Present placement area.

Section B- Knowledge Questionnaire

This section consists of 22 multiple choice questions to assess the level of knowledge of internship nursing students regarding preventive measures of UTI, introduction of UTI, removal of catheter, catheter care. There are 4 options in each question with one correct response. Each correct response is awarded with one point and incorrect response with zero point. The total possible responses are giving rise to a maximum score of 22.

Section C- PRACTICE CHECKLIST

This section consist of 20 items to assess the practice regarding catheter care of internship nursing students using 2 point "yes" or "no". It consists of positive statements with the maximum score of 1 points for yes and minimum score of 0 point for no. The maximum score is 20.