

INTRODUCTION

- Urinary tract infection (UTI) is one of the most common diagnosis for readmission to the hospital (Goldberg, 2017).
- Older adults are at increased risk for UTI and hospital readmission.
- Readmission is costly and debilitating (Goldberg, 2017).

BACKGROUND

- Older adults are prone to infections.
- Diagnosis of a UTI can be complicated.
- Early recognition of symptomatic UTI in older adults is problematic.
- Older adults often do not present with symptoms of a UTI such as fever, urinary burning or frequency.
- Early identification of UTI and timely initiation of appropriate treatment is important.
- Staff education on prevention and early indication of UTI can reduce incidence of an infection (Rantz, Et al 2014).

PURPOSE

The purpose of this project was to measure the effectiveness of an educational program on the knowledge of nurses related to urinary tract infection

METHOD

Project Design

- Replication project, pretest-posttest design (Freeman-Jobson, Rogers, Ward-Smith, 2016).
- A modified version of the questionnaire adopted from Freeman-Jobson et al (2016) measured participants pre-post intervention knowledge of urinary tract infection.
- The education program was 50 minutes in length.

Project Sample

- 21 nurses (18 RN's, 3 LPN's) across the 2 facilities who were employed on short-term care units participated in the educational program

CHARACTERISTICS OF THE SAMPLE

Gender	n	%
Male	4	19
Female	17	81

Age Category	n	%
18-26	3	14.3
27-35	2	9.5
36-50	6	28.6

Job	n	%
RN	18	85.7
LPN	3	14.3

Years of Experience	Cumulative %
< 5 years	57.1
> 5 years	42.9

INSTRUMENT

- Identify the reason which does NOT place the older individual at risk for a UTI
 - Old age
 - Decreased mobility
 - High fat diet
 - Poor hygiene
- Which is the best way to prevent UTIs
 - Increase fluids
 - Take preventive medication
 - Avoid caffeine
 - Use an adult diaper at night
- UTIs are diagnosed by
 - Urinary odor
 - Deep yellow colored urine
 - A laboratory test
 - Changes in vital signs
- When present, treatment for a UTI will include
 - Daily baths
 - Bedrest
 - An antibiotic
 - Placement of a urinary catheter
- Which health condition does NOT place a person at risk for a UTI
 - Dementia
 - Diabetes
 - Blindness
 - Previous stroke
- Assessment for UTI is the responsibility of
 - The MD only
 - The MD or the RN
 - The MD, RN, or PCT
 - Any family member
- Urinary incontinence is the initial sign of a UTI
 - Yes
 - No
- When are UTIs most likely to occur
 - Winter, during flu season
 - Summer, when the increased temperature increases dehydration
 - UTIs are not linked to any season
 - During the initial 30 days after admission
- Routine toileting will prevent UTIs
 - Yes
 - No
- Which of the following is NOT a symptom of a UTI
 - Confusion
 - Pain or tenderness in the lower abdomen
 - Fever
 - Decreased appetite
- Asymptomatic bacteriuria is a result of
 - Increased age
 - Decreased mobility
 - Decreased bladder emptying
 - All of the above

RESULTS

- Data were evaluated using paired sample t-test.
- pre-presentation evaluation (M=9.0, SD=1.06), post presentation evaluation (M=9.47, SD=.87), t=-1.817, p=0.088
- Individual item paired sample t-tests were performed to find content that was most improved after the educational program.
- Results from this analysis showed a significant improvement in knowledge related to how UTIs are prevented (p.003).
- Implementation of this program demonstrated 5% reduction in documented UTI and antibiotic use associated with UTI.

DISCUSSION

- Early identification of UTI is important given its prevalence.
- Lack of educational programs geared towards improving UTI management skills of health care providers.
- This replication project supports future UTI training programs in skilled nursing facilities
- For effective results in future studies, education must be tailored to participant educational and experience levels.
- Support from nursing facilities leadership can improve attendance and embrace wider audience such as CNAs, PT, OT, speech therapists.

LIMITATIONS

- Participants were not distinguished based on the level of education or experience in their role.
- CNA's were excluded from the study.
- The study was conducted in two nursing facilities with small sample size and may not generalize to other nursing facilities.
- Limited body of literature exists on the subject of continuing education on the prevention and management of UTI in post-acute care facilities.

IMPLICATIONS FOR NURSING PRACTICE

- Consequences from untreated UTI can be life threatening, early identification is critical.
- Nursing education can promote quality of care and reduce hospital readmission.
- Expand education to all staff involved in the care of older adults at risk.
- Information from this program can be used to better understand a knowledge gap in prevention and management of UTI in nursing facilities.
- Findings from this program support the idea that knowledge obtained had a positive impact related to the awareness of how UTIs are prevented.
- This program enhances an opportunity for future training programs in nursing facilities.

REFERENCES

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