

A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURE TEACHING PROGRAMME ONKNOWLEDGE REGARDING URINARY TRACT INFECTION AMONG ADOLESCENT GIRLS IN SELECTED SCHOOLS OF MEHSANA DISTRICT

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Abstract

Urinary tract infection is the second most commonly seen bacterial infection in the health care sector each year, more than 8 million people are diagnosed with urinary tract infections.¹ Urinary tract infection usually develops in the lower urinary tract (urethra and bladder) and if not properly treated they ascend to the upper urinary tract (ureters and kidneys) and cause severe damage to the kidneys. Other complications caused by UTIS are bladder infection (cystitis), urethral infection (urethritis), kidney infection (pyelonephritis) and infection of the ureter (urethritis).² A quantitative using pre-Experimental one group pre-test & post-test Research Design. The participate were 60 adolescent girls selected schools of Mehsana district. Structured teaching programme was given to the adolescent girls. Self-Structured Questionnaire was used to assess the level of Knowledge regarding urinary tract infection among Adolescent girls. In this study Among the 60 adolescent girls, the majority of the samples 19(31.66%) were in the age group of 19 years, 32(53.33%) of the sample were in the 11th standard, 60(100%) of the samples were in the science stream, were 26(43.33%) fathers have graduate & post graduate, were mother 40(66.66%) are graduate & post graduate, about socio economic status 43(71.66%) are from the middle class, were 60 (100%) sample having a history of UTI, in that 23(38.33%) were having two time signs and symptoms, most of the samples 34(56.66%) were have a knowledge about UTI, 11(26.433%) have knowledge from mass media. The findings of the study revealed that structure teaching programme helps in improving knowledge regarding urinary tract infection among adolescent girls. Assess, effectiveness, structure teaching programme. urinary tract infection, adolescent girls.

Keywords: urinary tract infections bladder infection, kidney infection, girls

INTRODUCTION

"Health is the greatest possession. Contentment is the greatest treasure. Confidence is the greatest friend."

-Lao Tzu

In urinary tract infection bacterial infections seen in primary care, next to respiratory tract infections. 61% of all urinary tract infection are managed in the primary care settings. It has been estimated globally that result in as many as 8.3 million visits to outpatient clinics, 1 million visits to emergency department, and 100000 hospitalization annually.¹

Different medical and nursing text books have mentioned that the urination habits, clothing, diet, menstrual protection and sexual intercourse are the risk factors for the urinary tract infection in women. But sound studies related to these aspects are few.¹

Urinary tract infection usually develops in the lower urinary tract (urethra and bladder) and if not properly treated they ascend to the upper urinary tract (ureters and kidneys) and cause severe damage to the kidneys. Other complications caused by UTIS are bladder infection (cystitis), urethral infection (urethritis), kidney infection (pyelonephritis) and infection of the ureter (ureteritis).²

In India, the national family health survey 2000 reported the prevalence of urinary tract infection among adolescent girls (10-19 years) as 16.6 and the risk of bacteremia developing in adolescent girls as 5-10%. Common risk factors for adolescent uti are poor hygiene, dysfunctional voiding patterns, use of synthetic underwear and panty hose, tight jeans, wet bathing suits, allergens/irritants, famine hygiene sprays, bubble baths, Perfumed toilet paper, sanitary napkins and soaps may aid in the development of cystitis. Lack of adequate knowledge and practices related to maintenances of health leads to various genitourinary infections during adolescence. Thus, it is very essential to initiate health intervention measures for the prevention and control of uti among adolescents.¹

According to the National Health and Nutrition Examination Survey (NHNES, 2014), Urinary tract infection is 13,320 per 1,00,000 adolescents per year and it has also been estimated that at least one-third of all school students in India are diagnosed with urinary tract infection by the time they reach 10-19 age. Silent urinary tract infection may occur among school girls which is due to inadequate intake of water and infrequent passage of urine. The main reason for this is unhygienic school toilets and improper teaching regarding menstrual hygiene. Dehydration can cause urinary tract infection.³

One in five women will have at least one uti in her lifetime. Nearly 20 percent of women who have a uti will have another, and 30 percent of those will have yet another. Of this last group, 80 percent will have recurrences. About 80 to 90 percent of utis are caused by a single type of bacteria.⁴

Times of India article January 2011 inform that only 12% of girls are used sanitary napkin period during menstrual period and maximum 88% of girls had used sanitized cloth. A study performed at Aurangabad, India; enunciate that 60% of urban area teenage girls used market accessible sanitary napkin whereas this was fixed to 60% in rural teenage girls. Advance recognition of contamination by proper preventive care and maintenance will encourage to decrease the risk of genitourinary tract infection like maintenance of good and proper daily personal care during menstruation and adequate intake of water also help to decrease the risk of genitourinary tract infection. Healthy personal practices female adolescent is the main fourth cause within the visiting of outpatient among teenage girls.⁵

NEED OF STUDY

According to European journal of molecular & clinical medicine (2020) knowledge and self-reported practices regarding prevention of urinary tract infection among adolescents' girls in selected college of Mangaluru, Karnataka, India. Data collected from 100 subject, it was found that 44% of subjects have good knowledge and followed by 10% of subject have very good knowledge, 29% subjects were have average knowledge and 17% of subjects were have poor knowledge. The percentage of overall level of knowledge was 64.7%.⁶

According to tropical journal of pathology and microbiology (2019) conducted research on a study on prevalence of bacterial isolates causing urinary tract infection at tertiary care hospital, Rajkot, Gujarat, India. Out of 1000 samples, 210 (21%) samples were found positive for UTI Isolates. Out of 210 positive cases, the

prevalence of UTI was higher in female patients (56.19%) than in male patients (43.81%). The highest susceptible age group of patients to UTI was found in 21-40 years (33.33%). The highest prevalence of UTI in female patient was found in the age group of 21-40 years (44.92%) while in male patients the highest susceptible age group to UTI was above 60 years (35.87%).⁷

Rakhi Gaur (2018) A true experimental design was to evaluate the effectiveness planned teaching programme on knowledge and practice regarding prevention of UTI among 100 adolescent girls at selected school in Udaipur (Rajasthan). The findings revealed that majority of adolescent girls (49%) belonged to the age group of 15-16 years and were Hindu (50%). The mean pre-test knowledge score was in experimental group 12.04 ± 3.29 and control group 11.38 ± 3.28 respectively while the mean pre-test practice score was in experimental group 12.94 ± 2.85 and control group 11.82 ± 2.48 respectively.⁸

According to k,b.institute of pharmaceutical education & research, (2016) Assessment of

knowledge of urinary tract infection amongst school going adolescent girls. Ahmedabad, India. A descriptive study was done with 307 females aged 12-16 year school going adolescent. Out of 307 girls 202 (65.79%) had no knowledge of UTI whereas 105 (34.21%), due to history had knowledge of UTI. The questions concerning hygiene, it was discovered that out of the total assessed population, 121 (39.41%) wash their vaginal area after urination whereas 186 (60.58%) are not washing. Further 270 (87.94%) girls change sanitary pads more than one time in a day during menstruation. It is also found that 156 (50.81%) girls consult physician if UTI symptoms occur.⁹

Lata B. Galate., Sonal Bangde, (2015) A study on Urinary Tract Infection of Microbiological Profile and its Antibiotic Susceptibility Pattern in Visakhapatnam. Out of a total of 732 patients, isolates were detected in 314 (42.89%) samples. Out of these, 64.01% were female. Most common microbial agent isolated was Escherichia coli (E.coli). Escherichia coli was highly resistant to Ciprofloxacin to Amikacin and Ceftriaxone. This study concluded that pattern of resistance to commonly used antibiotics for treating urinary tract infection alerts us against indiscriminate usage of antibiotics.¹⁰

According to Indian journal of community medicine (2012) antibiotic resistance pattern of community acquired Uropathogens at a tertiary care hospital in Jaipur, Rajasthan. by convenient sampling technique, 2012 urine sample collected from OPD patient, 346 of these urine sample significant growth of pathogen. Remaining 1666 sample had either non-significant bacteriuria or had very low bacterial count. The demographic profile of patient with community acquired utis. The patients between the ages 0 to 88 years were reported 130 (37.67%) males and 216 (62.42%) females.¹¹

STATEMENT OF THE PROBLEM

"A study to assess the effectiveness of structured teaching programme on knowledge regarding Urinary Tract Infection among adolescent girls in selected schools of Mehsana district."

OBJECTIVES OF THE STUDY

1. To assess the knowledge regarding urinary tract infection among adolescent girls.
2. To evaluate the effectiveness of structured teaching programme on knowledge regarding urinary tract infection among adolescent girls.
3. To find out the association between knowledge with their selected demographic variables.

HYPOTHESIS

H0: There will be no significant difference between pretest and posttest knowledge score regarding urinary tract infection among adolescent girls at 0.05 level of significant.

H1: There will be significant difference between pretest and posttest knowledge score after administration of structured teaching programme regarding urinary tract infection among adolescent girls at the 0.05 level of significant.

MATERIAL AND METHODS

Pre-experimental one group Pretest / Post test research design and Quantitative Approach. Effectiveness of structured teaching program on knowledge regarding Urinary tract infection among Adolescent girls in selected schools of Mehsana district. The data were collected from 60 Adolescent girls. "Non-Probability Convenient" sampling technique were used. A structured knowledge questionnaire was selected to assess the knowledge regarding Urinary tract infection.

RESULTS

Demographic data was analyzed using frequency and percentage. Frequencies, percentage, mean, mean percentage (%) and standard deviation was used to determine the knowledge score. The 't' value was computed to show the effectiveness of Structured teaching and chi-square test was done to determine the association between the pretest knowledge of Adolescent girls with selected demographic variables.

Finding related to demographic data

Among the 60 adolescent girls, the majority of the samples 19(31.66%) were in the age group of 19 years, 32(53.33%) of the sample were in the 11th standard, 60(100%) of the samples were in the science stream, were 26(43.33%) fathers have graduate & post graduate, were mother 40(66.66%) are graduate & post graduate, about socio economic status 43(71.66%) are from the middle class, were 60 (100%) sample having a history of UTI, in that 23(38.33%) were having two time signs and symptoms, most of the samples 34(56.66%) were have a knowledge about UTI, 11(26.433%) have knowledge from mass media.

Finding related to pre and post knowledge score:

In pre-test knowledge regarding urinary tract infection among 60 adolescent girls (40%) of adolescent girls had poor Knowledge (score: 0 - 6) regarding urinary tract infection While (60%) adolescent girls had average Knowledge (score 7-13) and (00%) of adolescent girls had good knowledge was observed.

In posttest that was marked improvement in the knowledge of adolescent girls with majority (68.33%) of adolescents gained good knowledge (score 14-20) and (31.66%) gained average knowledge (score 7-13). were (00%) of adolescent girls had poor knowledge was observed.

It was inferred from the below table that Structured teaching programme was effectiveness in improving knowledge regarding Urinary tract infection among adolescent girls.

Finding related to effectiveness of Structured teaching programme:

Table 1: Distribution of subject on paired 't' test between pre test and post test knowledge score of Urinary tract infection.

Parameter	Mean	Standard	Mean %	't' value
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		Deviation		
Pre-test	8.25	3.11	41.25%	t=10.62
Post-test	14.43	3.26	72.15%	

Finding related to association between pretest knowledge score of Adolescents with selected demographic variables:

The association between pre-test knowledge score and selected demographic variables like Age, Stream of education, Education of the mother, Education of the father, Socio economic status, Previous history of Urinary Tract Infection and Knowledge regarding urinary tract infection, source of information regarding urinary tract infection.

CONCLUSION

The present study aims to evaluate the effectiveness of Structured teaching programme on knowledge regarding Urinary tract infection. The study was conducted by using Pre- experimental one group pre-test post-test research design. Mehsana district was selected for conducting the study. The sample size was 60 Adolescent girls using non-probability convenient sampling method.

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