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Effectiveness of Planned Teaching Programme Regarding Knowledge and Prevention of Urinary Tract Infection Among Adolescent Girls Studying in Selected High Schools at Bagalkot

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ABSTRACT

Background: According to the WHO, Urinary Tract Infections are the main cause of morbidity. Approximately half of women's population reports Urinary tract infection at certain points. in their lives. UTI is one of the most common types of infection, accounting 25% of all infection. UTI during adolescence is related to many factors like low water intake, infrequent voiding and poor menstrual and sexual hygiene. Urinary tract infection can be treated and avoided, however if it remains untreated, this can lead to serious complications such as bacteraemia and nephropathy.
The urinary tract consists of the bladder, kidneys, ureters and urethra. UTIs are a common disorder that affects millions of people each year, and they are the second most common method of Infection in humans. The aim of this study was to assess the effectiveness of planned health lessons on knowledge regarding the prevention of urinary tract infections in young girls from selected schools.
Aims: The aim of the study was to determine the effectiveness of planned teaching programmed regarding knowledge and prevention of urinary tract infection.

Methodology:
Materials and Methods: This is a quantitative study and follows a pre-screening plan, i.e. a pre-test and post-test are written without a control group. The target group of this study is Adolescent girls studying in selected high school at Bagalkot. A total of 80 girls were rescued for investigation. Additional information was collected from a closed survey.
Results: Students' knowledge about urinary tract infections, pre-test scores showed that 38.75% of the sample had moderate knowledge, 51.25% had poor knowledge about urinary tract infections and 8.75% percent had good knowledge. About UTI, when test scores are passed About UTI, when test scores are passed, all have good knowledge about 8% about UTI.
Conclusion: The results of the study concluded that the knowledge and practice of adolescent girls could be improved by providing planned teaching programme.

Keywords: Adolescent, information. Knowledge. Planned teaching program, Urinary tract infection,

INTRODUCTION

'Health is a wealth', it is most essential for all people in all age group Adolescence

period is the time of transition from childhood to adulthood. The term adolescence literally means 'to emerge' or 'to achieve identity'. During this period social, psychological and physical transformation and maturation occur in adolescence.

The bladder and urethra are referred to as the infection of the lower urinary tract whereas the kidney and ureter infection is an indication of the upper urinary tract infection. UTI mainly affects women of the reproductive age group (16-44 years), maybe due to their anatomy and reproductive physiology women are particularly at risk of developing UTI. Recent statistics reveals that, symptomatic urinary tract infection will be present in 8% girls during their childhood. National Family Health Survey reported that, in India 16.1% of adolescent girls (15-19) presented with symptoms of urinary tract infection.

Goals:

1. To assess existing knowledge regarding the prevention of urinary tract infection among the adolescent girls.
2. Determining the effectiveness of urinary tract education methods for girls with selected high school at Bagalkot.
3. To find out association between knowledge with their selected socio demographic variables

MATERIAL AND METHODS

Research Design: A temporary non experimental small group design pre-test and post-test to determine the effectiveness of the planned teaching programme on prevention of urinary tract infection.

Hypothesis:

H1: There is a significant difference between the pre-test and post-test knowledge on prevention of Urinary tract infection. The sample consisted of 80 Youthful girls from British high school in Bagalkot.

SAMPLING TECHNIQUE: Use a Simple random scale to select samples.

Part 1: DATA COLLECTION INSTRUCTIONS:

Demographic performance includes information related to girl's age, religion, Education status, mother's occupation, father's occupation, type of family type of community, background UTI-related information.

Part 2: Scoring is done by counting correct answers as the total points earned. The maximum score is 26 points, which is arbitrarily divided into four levels. Harnweg's knowledge survey has 26 questions which is arbitrarily divided into four levels. Harnweg's knowledge survey has 26 questions. Subjects were instructed to check the letters (0-8 (bad)], [9-18 (fair)], [19-26 (good)].

VARIABLES IN THIS STUDY:

Variables: Dependent variable, which refers to the knowledge of urinary tract infection in young girls at BVVS English medium high school at Bagalkot.

Independent variable: Planning education programs. Participants.

Data collection: Data collected for the year 2024-12-2 Actual till 2024-12-10 Time and data for the year up to are prepared with the school authorities and communicated to the participants.

RESEARCH METHODOLOGY

Information was collected by a survey of demographic information and information samples, with a total of 26 questions. The reliability of the questions was determined by a test conducted by Carl Pearson on eight selected young girls ($\alpha = 0.05$). The main study was conducted by 80 young girls studying BVVS English medium school at Bagalkot.

RESULT

The study began with the selection of 80 adolescent girls who were presented at the BVVS English medium high school at Bagalkot.

It consists of 11 items. It includes age, religion, educational status, occupation, family monthly income, type of family, residence source of information.

TABLE 1: Description of socio demographic characteristics of sample.

Variables		**Frequency**	**Percentage**
Age	13-14 years	18	22.5%
	14-15 years	43	43.75%
	15 Above	33	33.7%
Religion	Hindu	35	43.75%
	Muslim	34	42.5%
	Christian	07	8.75%
	Others	04	5%
Educational status	8^{th}	19	23.75%
	9^{th}	37	46.25%
	10^{th}	24	30%
Types of family	Nuclear family	47	58.75%
	Joint Family	24	30%
	Extended Family	09	11.25%
Types of community	Rural community	47	58.5%
	Urban community	33	41.25%
Father education status	No formal education	07	8.75%
	Primary education	22	27.5%
	Secondary Education	43	53.75%
	Graduation and above	08	10%
Mother education status	No formal education	06	7.5%
	Primary education	28	35%
	Secondary Education	33	41.25%
	Graduation and above	13	16.25%
Father occupation	Agriculture	9	11.85%
	Business	26	32.5%
	Services	18	22.5%
	Others	27	33.75%
Mothers' occupation	Agriculture	8	10%
	Business	23	28.75%
	Services	24	30%
	Others	25	31.25%
Family Monthly income	Below 10,000/ month	33	41.25%
	10,000-20,000/ month	37	38.75%
	20,000/ above	16	20.%
Previously suffered UTI	Yes NO	27 53	33.75% 66.25%

Section I: Comparison of pre- and post-tests knowledge levels of girls.

Level of knowledge	**Pre-test**		**Post-test**	
	Number of respondents	**Percentage (%)**	**Number of respondents**	**Percentage (%)**
Good	12	15%	46	57%
Average	36	45%	28	35%
Poor	32	40%	6	8%
Total	80	100%	80	100%

Table 2: Comparison of pre- test and post-tests knowledge levels of girls. N=80

Comparison of knowledge in pre-test showed that majority of 80 girls (45%) had average knowledge, 40% had poor knowledge and 15% had good knowledge.

However, after following the teaching model, it turned out that 57% of the girls had good knowledge, 35% had average knowledge, and 8% girls had poor knowledge.

Table 3: Regional effectiveness of urinary tract infection teaching methods. N=80

Information Area	Max. score	Pre-Test (O_1)		Post-Test (O_2)		Effectiveness (O_2- O_1)	
		Mean ±SD	Mean %	Mean ±SD	Mean%	Mean ±SD	Mean%
Effectiveness of educational module on prevention of urinary tract infection	26	12.0875±2.27	46.44%	18.375± 3.875	70.48%	6.28	24.04

The overall results show that the post-knowledge test score (18.375 ± 3.875) accounts for70.48% of the total score; this is higher than the prior knowledge test score (12.0875 ± 2.27), which accounted for 46.44% of the total score. total score. The effectiveness of teaching methods in this area was measured with a knowledge score of 6.28 and SD ± 24.04, accounting for 24.04 of the total score. Hence, it indicates that the structure of the teaching program was effective in enhancing the knowledge level of girls.

Table 4: A Significant difference between the pre-post knowledge scores of girls studying at Shri BVVS English medium high school at Bagalkot.

Test (Knowledge)	Mean	Mean Diff	SD Diff	Paired t-value	Table value
Pre-test (O_1)	12.08	413.86	3.42	11.49	1.66
Post-test (O_2)	18.37				

The calculated "t" value (11.49) was higher than the table value (1.66) for degree of freedom (46) and 5% level of significance. There was a significant positive difference (11.49) between pre-post knowledge scores; hence, null hypothesis H1 is accepted.

Table 5: A research hypothesis was developed to investigate the relationship between knowledge and socio-demographic variable.

Sl. No	Socio demographic variables	df	Chi-square-value	Table value	P-value
1	Age	4	15.43	3.84	0.0039
2	Religion	6	3.09	3.84	0.7975
3	Education Status	4	14.71	3.84	0.0053
4	Type of family	4	4.29	3.84	0.3682
5	Type of community	2	3.76	3.84	0.1526
6	Father Education	6	1.19	3.84	0.9774
7	Mother Education	6	3.46	3.84	0.7493
8	Father Occupation	6	2.09	3.84	0.9112
9	Mother Occupation	6	11.28	3.84	0.0801
10	Income	4	1.71	3.84	0.7889
11	Previously suffered UTI	2	1.87	3.84	0.3926

DISCUSSION

Like other studies, the results of this study showed that 22.5% of participants were in the age group between 13 and 14 years, followed by 43.75% between 14 and 15 years. 33.7% of educated people over the age of 15 are illiterate, 27.3% are secondary school graduates and 24.3% of university student graduates. The majority of women (70.2%) are housewives. The overall

prevalence of urinary tract infections was 27.3%. The incidence of urinary tract infections is highest in pregnant women (43%). The majority of UTI women were rural housewives (65.9%) (72.4%) and illiterate (62.6%).

Conclusion:

The researchers felt a deep sense of satisfaction and satisfaction in conducting the research. This study provided deeper insights and empathy into the guidelines expert's direction needs, and teacher collaboration spent a course studying fruitful and comfortable experiences. Most research on UTIs focuses on adult women with limited research on youthful girls. This study addresses the knowledge and practices of young girls, particularly in terms of UTI prevention. This is a population that is particularly susceptible to UTIs. Using planned health lessons to improve your knowledge about UTI prevention is a relatively new approach.

Future prospects:

This study evaluates the effectiveness of planned comprehensive health lessons to improve UTI prevention knowledge. There was a higher level of knowledge and better perception among young girls. The UTI was satisfactory, especially for medical consultations and searching for liquid intake. Through continuous medical training through online health lessons in the health care system of schools and health centers, it can play an important role in improving young girls for Uti to avoid avoidance.

Contribution Of Authors:

Research concept: Mrs. Jayashree Itti
Research design: Mrs. Boramma Sanageri
Supervision: Mrs. Boramma Sanageri
Materials: All researchers
Data collection: All researchers
Data analysis and interpretation: all researchers
Literacy search: All researchers
Writing article: All researchers

Declaration by Authors

Ethical Approval: Approved
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