Effectiveness of Planned Teaching Programme Regarding Knowledge on UTI among Adolescent Girls at Selected Schools

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Abstract

The study was conducted to Assess The Effectiveness of Planned Teaching Programme Regarding In Term of Level of Knowledge on Urinary Tract Infection Among Adolescent Girls at selected schools of Raipur, Chhattisgarh. An evaluative approach and a pre-experimental one group pre-test and post- test research design was adopted for the study. For data was collected using random sampling technique among 30 adolescent girls. A predesigned structured interview based questionnaire was used which contain question related to puberty, hygiene and urinary tract infection. There was a significant association between prevalence of urinary tract infection and improper perineal washing technique (CL=95%, p<0.001), malnutrition (CL=95%, p<0.001). Presence of vaginal discharge (CL=95%, p<0.001) and use of unsanitary napkins during periods or menses (CL=95%, p<0.001). Misconception included not taking bath during periods and not eating certain foods. Low socio- economic status was chiefly responsible for frequent use of same piece of cloth as sanitary pads during menstrual bleeding leading to urinary tract infection.

Keywords: Knowledge; Planned Teaching Programme; Urinary Tract Infection.

Introduction

Back ground of study:

Urinary tract infections are painful and uncomfortable, yet avoidable. Over 50% of women had have had at least one urinary tract infection and over 20% have had multiple. Urinary tract infection are responsible for over 8 million doctor's visits per year. Sexual activity is a high risk factor for developing urinary tract infection in women. UTI are most typically caused by E.coli that has been transferred to the urinary tract from the bowel. This transfer can be initiated through sexual activity. Therefore adolescent girls must have adequate knowledge towards urinary tract infections.This study was conducted toAssess The Effectiveness of Planned Teaching Programme Regarding In Term of Level of Knowledge On Urinary Tract Infection Among Adolescent Girls.

Need of study:-

"To acquire knowledge one must study; but to acquire wisdom, one must observe."

- Marilyn Vos Savant

This is a crucial periodin the adolescent lifebecausealternation in the physical and physiological functions takes place in the body. In this stage of their life the adolescent should take care of themselves in various aspects like personal hygiene, nutrition, exercise and periodic health checkups. Adolescents are a large and growing segment of the population. The world Health Organization has defined adolescent as the age group of 12-18 years.

A study was carried out to determinate the

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incidence of UTI among children and adolescence in Nigeria to identify the uropathogens responsible for the infection among 301 children and adolescents (124 females, 177 males) aged 15-18 years. The result of the study showed that 124 females examined 28 (22.5%) had positive urine culture. Another survey was conducted on incidence of urinary tract infections and study revealed that 1.7 per 1000 adolescent girls were at risk of urinary tract infection compared to 1.3 per 1000 boys.

Problem Statement:

"A Study To Assess The Effectiveness of Planned Teaching Programme Regarding in Term of Level of Knowledge on Urinary Tract Infection Among Adolescent Girls at Selected Schools of Raipur, Chhattisgarh."

Objectives of the Study:

1. To assess the pretest knowledge score regarding urinary tract infection.
2. To assess the posttest knowledge score of urinary tract infection.
3. To evaluate the effectiveness of planned teaching programme regarding urinary tract infection.
4. To associate the selected demographic variables with level of knowledge of adolescent girls.

Conceptual framework: Conceptual framework for the present study was developed by applying LudwigvonBertanffy open system theory (1968).

Material And Method

Research approach: Evaluative approach was adopted for this study.

Research design: Pre experimental one group pre-test and post-test research design was found to be most appropriate for this study.

Research setting: The present study was undertaken in Govt. high school, Mandhar colony, Raipur, (C.G.) due to the geographical proximity, feasibility of the study and availability of sample.

Population:

Target population: The target for the present study comprised of adolescent girls between 12-18 years in Govt. high school, Mandhar colony, Raipur,(C.G.)

Sample: In this study the sample consisted of adolescent girls between 12-18 years in Govt. high school, Mandhar colony, Raipur, (C.G.)

Sample size: The sample size of the study is 30 Adolescent girls who fulfill the exclusion and inclusion criteria.

Sampling technique: Simple random sampling technique

Inclusion criteria: Adolescent girls who are willing to participate in the study and adolescent girls at an age group of 12-18 years

Exclusion criteria: Adolescent girls who are not willing to participate in the study and those who students having age above 18 years

Method of data collection: The tool consist of 2 sections "A" & "B"

Section A – Interview for socio demographic variable

Section B – Questionnairefor knowledge assessment

Development of tool:

The tool was developed by using the following steps

• Reviewing the related literature

• Past knowledge experience of the investigator

• The opinion of the subject expert in nursing

Reliability:

Procedure used to calculate the reliability of the research instrument is Split-half method. The formula used Karl Pearson correlation coefficient. The reliability obtained for the self structured questionnaire score is 1.0 respectively.

Data collection procedure: Data collection is done in govt. high school, Mandhar colony, Raipur. A written permission was obtained from the concerned authority. Data collected from 30 adolescent girls who fulfilled the inclusion and exclusion criteria. After a brief introduction of selfand study, a written consent of the participant was sought. Data collection was done. The investigator expressed thanks to the samples thus data collection was terminated. The analysis was done by using descriptive and inferential statistics in following manner:

• Organizing in a master sheet

• Frequency and percentage distribution of sample characteristics. Chi square test analysis used to associate selected demographical variables with planned teaching programme.

• Assess the effectiveness of planned teaching programme regarding urinary tract infection by using t-test.

Results

The data collected were organized and presented under the following sections

Section 1: Distribution of sample based on socio demographic characteristics

Percentage analysis was carried for demographic variables and presented in the form of table and graph.

As per demographic variables depicts that 6.67% (2) subject belongs to age group of 12–14 year, 26.67% (8) subject belongs to age group of 14-16 year and 66.67% (20) subject belongs to age group of 16-18 year.

In relation to religion of the subject depicts that 100%(30) student were Hindu and 0% were Muslim, Christian and Sikhs.

In relation to type of family of the subject depicts that 60% (18) student were belong to joint family 40% (12) student were belong to nuclear family.

Distribution of subject according to income depicts that 10%(3) students were from below Rs.5000 income, 36.67% (11) students were having Rs.5001-7000 income, 40% (12) were having Rs. 7001-10000 income. 13.33% (4) students having above Rs.10000 income.

Distribution of subject according to mass-media exposure depicts that 43.33% (13) students were having T.V., 13.33% (4) students were having newspaper knowledge, 0% (0) students were having internet knowledge and 43.33% (13) students were having all above knowledge.

In relation to previous knowledge of the subject depicts that 60% (13) students were joint family 40% (12) subject belong to nuclear family.

Section 2: Analysis of knowledge regarding urinary tract infection

Depicts the analysis of pre-test knowledge score on the basis of criterion maximum school students 20 (66.67%) had poor knowledge, 10 (33.33%) had average and 00 (0%) had good knowledge regarding urinary tract infection. The analysis of post-test knowledge scores on the basis of criterion maximum school students 10 (33.33%) had average knowledge, 3 (10%) had good knowledge (Table 1).

Depicts that in the analysis of mean pre-test knowledge scores of school students regarding urinary tract infection mean score was 9.33, mean percentage was 31.1%, SD was found to be 2.34 and mean post-test knowledge score 18 was higher than mean pre-test knowledge score, mean percentage was 60%, SD was found to be in post-test 1.93 and pre-test was found 2.34. CV was found to be in pre-test 25.08 and post-test was 10.72. Median was in pre-test 9.5 and post-test was 18 (Table 2).

Section 3: Effectiveness of planned teaching program regarding urinary tract infection

Depicts that analysis of pre-test and post-test knowledge score to find out the effectiveness of planned teaching program regarding urinary tract infection in pre-test mean score was 9.33, mean percentage score was 31.1 and standard deviation was 2.34. Analysis of post-test knowledge mean

Table 1: Analysis of overall knowledge score regarding urinary tract infection among adolescent girl   **n= 30**

S.no	Level of knowledge	Pre-test		Post-test	
		Frequency	%	Frequency	%
1	Poor score	20	66.67%	00	0%
2	Average score	10	33.33%	10	33.33%
3	Good score	00	0%	03	10%

Table 2: Analysis of difference of knowledge score among adolescence

Mean score, mean score percentage, and standard deviation of knowledge score.   n=30

Samples	Frequency	Mean	Mean %	Standard Deviation	CV	Median
Pre-test	30	9.33	31.1	2.34	25.08	9.5
Post-test	30	18	60	1.93	10.72	18

Table 3:   n=30

Samples	N	Mean	Mean%	SD	Unpaire 't' value	DF	P value	Inference
Pre-test	30	9.33	31.1	2.34	15.27	29	<0.0001	Highly significant
Post-test	30	18	60	1.93				

Table 4:   n=30

S.no.		Knowledge			Total	Chi square value	DF	P value	Inference
1	Age group	Poor	Average	Knowledge					
	12-14 Yr	2(100%)	0(0%)	0(0%)	2(100%)	7.5	2	<0.03	Significant
	14-16 Yr	8(100%)	0(0%)	0(0%)	8(100%)				
	16-18 Yr	10(50%)	10(50%)	0(0%)	20(100%)				
	Total	2000(66.67%)	10(33.33%)	0(0%)	30(100%)				
2	**Family type**	**Poor**	**Average**	**Knowledge**	**Total**	**Chi square value**	**DF**	**P value**	**Inference**
	Joint	10(62.5%)	6(37.5%)	0(0%)	16(100%)	0.27	1	>0.05	Not significant
	Nuclear	10(71.43%)	4(28.57%)	0(0%)	14(100%)				
	Total	20(66.67%)	10(33.33%)	0(0%)	30(100%)				
3	**Income**	**Poor**	**Average**	**Knowledge**	**Total**	**Chi square value**	**DF**	**P value**	**Inference**
	Below 5000	3(100%)	0(0%)	0(0%)	3(100%)	2.04	3	>0.05	Not significant
	5001-7000	7(63.64%)	4(36.36%)	0(0%)	11(100%)				
	7001-10000	8(66.67%)	4(33.33%)	0(0%)	12(100%)				
	Above10000	2(50%)	2(50%)	0(0%)	4(100%)				
	Total	20(66.67%)	10(33.33%)	0(0%)	30(100%)				
4	**Media exposure**	**Poor**	**Average**	**Knowledge**	**Total**	**Chi square value**	**DF**	**P value**	**Inference**
	T.V.	9(69.23%)	4(30.77%)	0(0%)	13(100%)	0.57	2	>0.05	Not significant
	News paper Internet	2(50%)	2(50%)	0(0%)					
	All of the above	9(69.23%)	4(30.77%)	0(0%)	13(100%)				
	Total	20(66.67%)	10(33.33%)	0(0%)	30(100%)				
5	**Previous knowledge**	**Poor**	**Average**	**Knowledge**	**Total**	**Chi square value**	**DF**	**P value**	**Inference**
	Yes	11(84.%)	2(15.38%)	0(0%)	13(100%)	3.32	1	>0.05	Not significant
	No	9(52.94%)	8(47.06%)	0(0%)	17(100%)				
	Total	20(66.67%)	10(33.33%)	0(0%)	30(100%)				

score 18, mean percentage 60, standard deviation was 1.93 and t value was found to be significant at <0.0001 level (Table 3).

Section 4: Association between selected demographic variable with level of knowledge of adolescent girls in pre-test

Depicts that analysis to find out the association between pre-test knowledge score of school students regarding urinary tract infection, with selected demographic variable. Table 4 reveals that the findings with regard to association of knowledge with age the value was 7.5 df=2 which was significant at p=<0.03, with regard to type of family the value was 0.27 df=6 which was not significant at p=>0.05, with regard to income the value was 2.04 df=2 which was not significant at p=>0.06, with regard to media exposure the value was 0.57 df= 2 which was not significant at p=>0.05, with regard to previous knowledge the value was 3.32 df= 2 which was not significant at p=0.05 (Table 4).

The findings reveal that age group (7.5) which is significant at <0.03 level of significance, so that research hypothesis is accepted and null hypothesis is rejected. And students with type of family (0.27), students with income (2.04), students with media exposure (0.57), students with previous knowledge (3.32) which is not significant at <0.03 level of

significance. So that research hypothesis is rejected and null hypothesis is accepted.

Discussion

The findings of the study were discussed under the following headings:-

Section 1: Percentage analysis was carried for demographical variable and percentage in form of table and graph.

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- As per demographic variables depicts that 6.67% (2) subject belongs to age group of 12 – 14 year, 26.67% (8) subject belongs to age group of 14-16 year and 66.67% (20) subject belongs to age group of 16-18 year.

- In relation to religion of the subject depicts that 100% (30) student were Hindu and 0% were Muslim, Christian and Sikhs.

- In relation to type of family of the subject depicts that 60% (18) student were belong to joint family 40% (12) student were belong to nuclear family.

- Distribution of subject according to income

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• Distribution of subject according to mass-media exposure depicts that 43.33% (13) students were having T.V., 13.33% (4) students were having newspaper knowledge, 0% (0) students were having internet knowledge and 43.33% (13) students were having all above knowledge.

• In relation to previous knowledge of the subject depicts that 60% (13) students were joint family 40% (12) subject belong to nuclear family.

Section 2: Analysis of subject based in pre-test knowledge regarding urinary tract infection.

• Analysis of overall knowledge score regarding urinary tract infection among adolescent girl

• Analysis of difference of knowledge score among adolescence

Section 3: Analysis of subject based in post-test knowledge regarding urinary tract infection.

Section 4: T-test to find out the effectiveness of planned teaching programme on knowledge of adolescent girls regarding urinary tract infection.

Limitations

The present study was limited to adolescent girls who are studying in govt. high school, Mandhar colony, Raipur, (C.G.) The research is limited to 30 samples so, the study are not generalized.

Recommendation

On the basis of the findings of the study it is recommended that

• A similar study may be replicated on larger sample, there by findings can be generalized for a large health personnel.

• A similar study can be contacted including the dimension of knowledge of urinary tract infection.

• Similar kind of studies can be undertaken in different settings and with health personnel such as doctors, scientists, pathologists, nurse and personnel.

• A study can be carried out to ascertain the knowledge and practice regarding urinary tract infection.

Conclusion

The investigator concluded that there is an increase in knowledge of school students after giving them structured planned teaching programme regarding knowledge of urinary tract infections and there is increased effectiveness of structured planned teaching programme. Thus need for structured planned teaching programme for promoting awareness and increasing knowledge regarding urinary tract infections for all health personnels.

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