



## Evaluation of the effectiveness of structured teaching programme on the knowledge regarding urinary tract infection among adolescent girls at selected school in Aurangabad, Maharashtra

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### Abstract

In this study effectiveness of structured teaching programme on the knowledge regarding Urinary Tract Infection (UTI) among adolescent girls was evaluated by using structured questionnaire. The research design used in the study was one group pretest post test pre experimental design. The knowledge regarding UTI was assessed before and after the structured teaching programme. The conceptual frame work of the study was based on Ludwig Von Berfalanffy's General System Model. The study was conducted among 30 Adolescent girls at selected school. The data was collected and analyzed based on objectives of the study by using descriptive and in referential statistics. The study result revealed that the structured teaching programme increased the knowledge on UTI among Adolescent girls. The study concluded that structured teaching programme can play a vital role in imparting knowledge to the adolescent girls.

**Keywords:** structured teaching programme, knowledge, urinary tract infection, adolescent girls

### Introduction

Urinary tract infection (UTI) is the common of all in affecting humans throughout their lifespan. It occurs in all populations- from neonates to geriatric patients. But it has a particular impact on females of all ages especially during adolescent period. Urinary tract infections are much more common in adults than in children, but about 1-2% of children do get urinary tract infections. Urinary tract infections in children are more likely to be serious than those in adults and should not be ignored especially in younger children. The reason is that anatomic differences between the genders a shorter urethra in women might be partially responsible [1].

Urinary tract infection is the inflammation of urinary tract. This infection in the urinary tract will produce the signs and symptoms like, fever, dysuria, urgency, and suprapubic pressure or discomfort, flank pain, chills etc [2].

A variety of organisms can cause urinary tract infection. Some of the organisms are Escherichia coli, enterococcus, klebsiella, enterobacter, serratia etc. Approximately 20% of adolescent girls with first episode of urinary tract infection will have recurrent urinary tract infection. Proper diagnosis, treatment or management and follow up should be followed for the occurrence and recurrent occurrence of urinary tract infection. Especially for the adolescent girls to prevent the occurrence and recurrence of urinary tract infection they have to maintain good personal hygiene during menstrual period, each and every urination. Certain preventive measures include the intake of cranberry juice intake of more amount of water, practice proper bladder emptying practices and maintain good hygienic measures during menstruation will help to prevent the urinary tract infection in females especially in adolescent girls [3].

Adolescence is an extremely enthusiastic, energetic, joyous

and fun-loving period. But the beauty of this phase is marked by emotions, myths, insecurities, apprehensions, misbelieves etc which are the direct result of lack of information and knowledge [4]. This is a crucial period in the adolescent life because alteration in the physical and physiological functions takes place in the body. In this stage of their life the adolescents should take care of themselves in various aspects like personal hygiene, nutrition, exercise and periodic health check-ups [5].

### Problem Statement

“Evaluation of the Effectiveness of Structured Teaching Programme on the Knowledge Regarding Urinary Tract Infection among Adolescent Girls at Selected School in Aurangabad, Maharashtra”

### Objectives

1. To assess the existing knowledge regarding urinary tract infection among adolescent girls.
2. To assess the effectiveness of structured teaching program regarding urinary tract infection among adolescent girls.
3. To determine the association of post test knowledge with selected demographic variables of adolescent girls.

### Hypothesis

**H<sub>01</sub>:** There is no significant difference in the knowledge regarding Urinary tract Infection after Structured Teaching Programme

**H<sub>1</sub>:** There is a significant difference in the knowledge regarding Urinary tract Infection after Structured Teaching Programme

**H<sub>02</sub>:** There is no significant association of post test knowledge score with selected demographic variables.

**H2:** There is a significant association of posttest knowledge score with selected demographic variables.

**Material and method**

- **Research Approach:** Evaluatry Approach
- **Research Design:** Pre experimental one group pretest posttest design
- **Setting:** Selected School in Aurangabad
- **Population:** Adolescent girls
- **Sample:** Adolescent girls Selected School in Aurangabad
- **Sampling Technique:** Non-probability Purposive Sampling
- **Sample size:** 30 Adolescent girls

**Description of the tool**

Tool is divided into two parts, Part-A and Part-B  
 Part A: Demographic data of Adolescent girls which consisted of 5 questions.  
 Part B: Structured Questionnaire consists of 15 questions related to knowledge regarding UTI among Adolescent girls.

**Results**

Part A: Demographic data of Adolescent girls

**Section I**

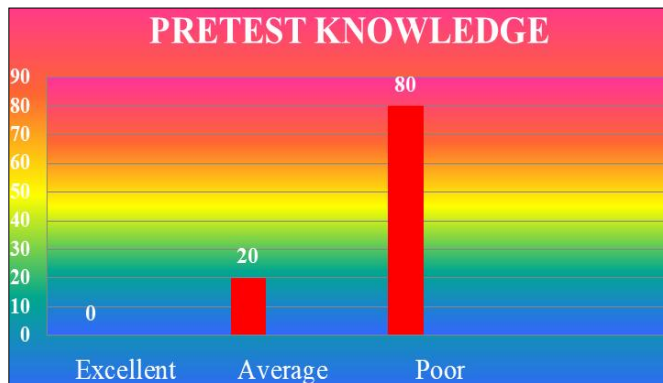
**Table 1:** Frequency and percentage distribution of socio-demographic variables of Adolescent girls.

Characteristics	Frequency	Percentage
<b>Age ( In Years)</b>		
12-13	20	66.6
13-14	8	26.6
14-15	2	6.6
<b>Religion</b>		
Hindu	10	33.3
Muslim	3	10
Christian	6	20
Buddist	11	36.6
<b>Type of Family</b>		
Nuclear	21	70
Joint	9	30
<b>Education of Mother</b>		
Illiterate	4	13.3
Primary	5	16.6
Middle	7	23.3
Secondary	8	26.6
Higher secondary and above	6	20
<b>Monthly Family Income</b>		
< Rs.10,000/-	10	33.3
Rs.10,001/-- Rs.15,000/-	11	36.6
Rs.15,001/-- Rs.20,000/-	6	20
>Rs.20,001/-	3	10

**Section II**

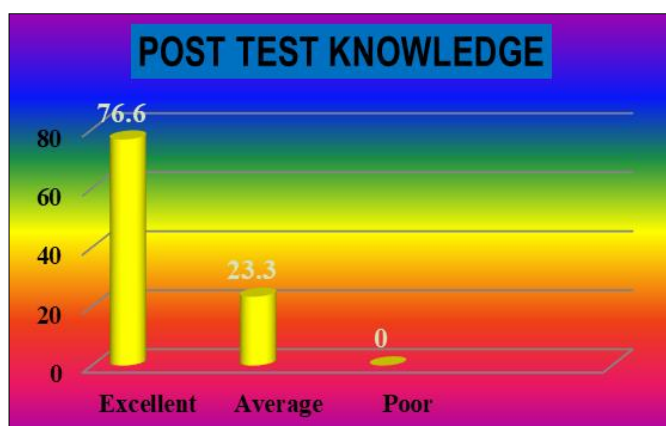
Assessment of level of knowledge among adolescent girls

**Part A-** Assessment of Pre-Test level of Knowledge



**Fig 1:** Clustered Column depicts the distribution of samples according to level of Knowledge before administration of Structured Teaching Programme

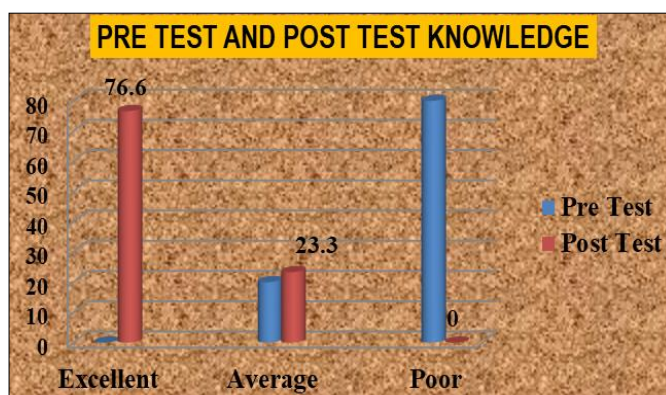
**Part B-** Assessment of Post-Test level of Knowledge



**Fig 2:** Clustered Cylinder depicts the distribution of samples according to level of Knowledge after administration of Structured Teaching Programme

**Section III**

To find out the effectiveness of structured teaching program on Knowledge among adolescent girls



**Fig 3:** Clustered Cylinder depicts the distribution to level of Knowledge before and after administration of Structured Teaching Programme

**Table 2:** Evaluating the effectiveness of Structured Teaching Programme among Adolescents.

Sr. No.	Mean	Mean Difference	df	SD	't' Value
Pre-Test	6.53	5.17	29	1.78	15.84
Post-Test	11.7				

Paired t-test was used to evaluate the effectiveness of structured teaching program. Calculated t-value pretest and posttest was 15.84 at 0.05 level. The average mean knowledge

score in pre-test was 6.53 which were increased to 11.7 in post-test level of knowledge. This indicated that structured teaching program increased the level of knowledge among adolescent girls. So, H<sub>1</sub> Hypothesis is accepted and H<sub>01</sub> is rejected.

**Section IV**

To find out the association of posttest knowledge with selected demographic variables.

**Table 3:** Association of posttest knowledge with selected demographic variables.

Demographic Variables	Poor		Average		Excellent		Total	X <sup>2</sup>	P Value
	F	%	F	%	F	%			
Age									
a)	0	0	5	16.6	15	50	20	32.4 (S)	7.82
b) 13-14	0	0	2	6.6	6	20	8		
c) 14-15	0	0	0	0	2	6.6	2		
Religion									
a) Hindu	0	0	3	10	7	23.3	10	5.4 (NS)	7.82
b) Muslim	0	0	1	3.3	2	6.6	3		
c) Christian	0	0	2	6.6	4	13.3	6		
d) Buddhist	0	0	1	3.3	10	33.3	11		
Type of Family									
a) Nuclear	0	0	4	13.3	17	56.6	21	4.8 (S)	3.84
b) Joint	0	0	3	10	6	20	9		
Education of Mother									
a) Illiterate	0	0	1	3.3	3	10	4	1.6 (NS)	9.49
b) Primary	0	0	1	3.3	4	13.3	5		
c) Middle	0	0	0	0	7	23.3	7		
d) Second	0	0	2	6.6	6	20	8		
e) Higher secondary and above	0	0	3	10	3	10	6		
Monthly Family Income									
a) < 10000/-	0	0	3	10	7	23.3	10	5.4 (NS)	7.82
b) 10001/--15000/-	0	0	1	3.3	10	33.3	11		
c) 15001/--20000/-	0	0	2	6.6	4	13.3	6		
d) >20,001/-	0	0	1	3.3	2	6.6	3		

**S-Significant NS-Non significant**

Among 5 demographic variables, 2 demographic variables were found to be significant (at 0.05 level). According to calculated X<sup>2</sup> value of Age and Type of family found to be significant. The remaining three demographic variables were no significant association of posttest knowledge with selected demographic variables. So, H<sub>2</sub> Hypothesis is accepted and H<sub>02</sub> is rejected.

**Conclusion**

Prior to implementation of Structured Teaching Programme adolescents had inadequate Knowledge regarding Urinary tract Infection, the effectiveness was evaluated by posttest score the mean score had improvSed from 6.53 to 11.7 after implementation of Structured Teaching Programme. It shows that Structured Teaching Programme was effective. The calculated t- value is statistically significant at 0.05levels as the calculated t- value is more than table value.

**Reference**

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