A Study To Assess The Effectiveness Of Self Instructional Module Regarding Prevention Of Urinary Tract Infection Among Adolescent Girls In Selected Colleges At Nellore.

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Abstract:
Background: Adolescents are a large and growing segment of the population. The world health organization has defined adolescents as the age group of 13-18 years, there are an estimated 1.2 billion young people aged 13-18 years in the world, the largest generation of adolescents in history. More importantly, adolescence is a transition period and crucial stages in their life. Objective: To assess the level of knowledge regarding urinary tract infections among adolescent girls in selected colleges at Nellore. To develop and administer self instructional module on knowledge regarding prevention of urinary tract infection among adolescent girls. To evaluate the effectiveness of self instructional module on prevention of urinary tract infection among adolescent girls. To associate the level of knowledge with selected demographic variables among adolescent girls. Materials and Methods: pre experimental - one group pre-test – post-test design and convenient sampling technique was followed which included 30 samples were used. Data was collected using structured questionnaire. Data analysis was done with SPSS. Results: pre- test shows that with regard to prevention of urinary tract infections among 30 adolescents girls 26 (86.6%) had inadequate knowledge 4(13.4%) had moderately adequate knowledge and post- test 6(20%) had inadequate knowledge 22(73.3%) had moderately adequate knowledge and 2(6.7%) had adequate knowledge. Conclusions: The study concluded that self instructional module is effective in enhancing the knowledge among adolescent girls.

Keywords: prevention, urinary tract infection, menstrual period

INTRODUCTION:
Adolescents are a large and growing segment of the population. The world health organization has defined adolescents as the age group of 13-18 years, there are an estimated 1.2 billion young people aged 13-18 years in the world, the largest generation of adolescents in history. More importantly, adolescence is a transition period and crucial stages in their life. Urinary tract infections are much more common in adults than in children. The prevalence of Lower Urinary Tract Symptoms was significantly more in those girls using unsanitary pads during menstruation, practicing improper anal washing technique, having vaginal discharge, malnourished, having pinworms in stools and using bad toilets, 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)¹.

The reason for this is not well understood, but anatomic differences between the genders (a shorter urethra in women) might be partially responsible. About 40% of women and 12% of men have a urinary tract infection at some time in their life². 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 infection³. 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. The infections are a main source of morbidity and health-care costs in this population⁴.
Urinary tract infection 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). Certain preventive measures include the intake of cranberry juice intake of more amount of water, practice proper bladder emptying practices etc will help to prevent the urinary tract infection in females especially in adolescent girls.\(^5\)

**NEED FOR THE STUDY**

As per WHO it is estimated that one billion women around the world suffer from non-sexually transmitted urogenital infections, including bacterial vaginitis, yeast vaginitis and urinary tract infection (UTI). Adolescents constitutes about one fifth (1/5\(^b\)) of the population\(^1\). Therefore it can be considered one huge segment of the total population. Urinary tract infection is highly prevalent among adolescents with 3-5% of incident rate . The male and female sex ratio of occurrence is 1:50 which is as equal as young adults\(^7\). The second leading cause of morbidity is urinary tract infection, which accounts for about 8.3 million doctor visits in a year. One woman in five times develop urinary tract infection during her life time. Adolescents constitutes about one fifth (1/5\(^b\)) of the population. Urinary tract infection is highly prevalent among adolescent girls with 3-5% of incident rate.\(^8\)

**MATERIALS AND METHODS:**

**Sampling and data collection:**

Quantitative research approach, Pre-experimental –one group, pre-test and post test design was used to assess the effectiveness of self instructional module on prevention of urinary tract infection among adolescent girls in selected colleges at Nellore district. Non-probability convenient sampling was used. Adolescents who were eligible, can understand regional language, who were available during data collection and voluntarily willing to participate in the study. Who are sick, who are on leave were excluded. Prior Permission was obtained from ethical clearance committee Participants signed an informed consent and were told they could withdraw from the study at any time for any reason.

**DESCRIPTION OF TOOL**

**PART I:**

Deals with demographic variables include age, educational qualification, family income, type of family income, dietary pattern, water intake per day, source of information.

**PART II:**

It deals with structured questionnaire to convey the effectiveness of self instructional module on prevention of urinary tract infection among adolescent girls. It consists of 30 multiple choice questions. Each question gives success answer as 1 score. If not answering gives 0 score.

**Score Interpretation:** The score was interpreted as follows:

- Inadequate knowledge: 0-10
- Moderately adequate: 11-20
- Adequate knowledge: 21-30

**Data analysis:** Data was analysed by using descriptive and inferential statistics. Frequency, percentage, mean, standard deviation and chi-square test were done.

**Results:** The results shows that frequency and percentage distribution with regard to age 9(30%) adolescent girls are between 13-14 years , 10(33.34%) are between 15-16 years and are between 17-18 years (36.66%) with regard to educational qualification , 14(46.67%) secondary education, 16(53.33%) intermediate, with regard to family income, 2(6.7%) below 5000 , 17(56.6%) 5001-7000, 9(30%) 7001-9000 and 2(6.7%) 9001-11000, regard to type of family 12(40%) joint family, 12(40%) nuclear family, 6(20%) extended family, regard to dietary pattern 2(6.7%) vegetarian, 3(10%) non vegetarian,25(83.3%) with regard to water intake per day 3(10%) < 2liters, 6(20%) 2-3 liters , 8(26.7%) 3-4 liters,13(43.3%) >5liters, regard to source of information, 1 (3.4%) gained from mass media , 8(36.6%) from news paper , 16(53.3%) from friends/relatives and 2(6.7%) from health person.

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<tr>
<th>Knowledge level</th>
<th>pre test</th>
<th>post test</th>
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<td></td>
<td>f</td>
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<tr>
<td>INADEQUATE</td>
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<td>86.6</td>
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<tr>
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<td>13.4</td>
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<td>ADEQUATE</td>
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<td>TOTAL</td>
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Table no: 02 Effectiveness of self-instructional module on prevention of urinary tract infections among adolescent girls. (n=30)

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<td>11.66</td>
<td>3.27</td>
<td>16.83</td>
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<td>df=29</td>
<td>T=2.05</td>
<td>P=0.05</td>
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For adolescent girls there was significant association with education qualification and remaining demographic variables age, family income, dietary pattern, type of family, water intake per day and source of information are not significant.

**DISCUSSION:**
The discussion of the present study was based on the findings obtained from the descriptive and inferential statistical analysis of collected data. It is presented in the view of the objectives of the study. The study related to assess the effectiveness of self instructional module on prevention of urinary tract infection among adolescent girls majority26 (86.6%) had inadequate knowledge in pre-test and among adolescent girls majority 22(73.3%) had moderate knowledge. There was significant association with education qualification and remaining demographic variables age, family income, dietary pattern, type of family, water intake per day and source of information are not significant.

**CONCLUSION:**
The study concludes that self instructional module is effective in enhancing the knowledge among adolescent girls.

**RECOMMENDATIONS:**
1. A similar study can be conducted on large number of sample in different settings.
2. The intervention can be made as regular, reduce the complication of UTI.

**ACKNOWLEDGEMENT:**
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**REFERENCES:**