

Effectiveness of Planned Health Teaching Programme on Knowledge Regarding Prevention of Urinary Tract Infection Among Adolescent Girls of Selected Schools

Ms Arpana Charles Sonawane^{1*} Ms. Leena Aswale² Ms. Dipti Adhav³

¹.Nursing Tutor College of Nursing, B.J.G.M.C.& S.G.H, Pune.

².Lecturer, Dept of OBGYNursing, Sinhgad College of nursing, Pune.

³P.G. Student of Sinhgad College of Nursing, Pune.

Abstract

Today increasing emphasis is placed on health promotion, wellness, and self-care. Health is seen as resulting from a lifestyle that is oriented towards wellness. The result has been the evolution of a wide range of health promotion strategies, including life time health monitoring programmes, environmental health programmes, risk reduction and nutrition, and health education. The study's goal was to assess the effectiveness of planned health teaching programme on knowledge regarding prevention of Urinary Tract infection among adolescent girls of selected schools. Methodology: This research employed a Quantitative method, as well as a one group pre-test post-test research design. The research was carried out among 100 adolescent girls of selected schools in the City chosen using a non-probability purposive sampling technique. The information was gathered using a program that included demographic characteristics and Structured knowledge questionnaire. Data were acquired using a reliable technique that included demographic information and knowledge surveys. SPSS 20 was used to do data analysis. Result: pre-test, 13% of the adolescent girls of selected schools had poor knowledge, 33% of the adolescent girls had average, 34% of them had good knowledge and 20% had excellent knowledge regarding prevention of Urinary Tract infection. post-test, 1% of the adolescent girls of selected schools had poor knowledge, 6% of the adolescent girls had average, 52% of them had good knowledge and 41% had excellent knowledge regarding prevention of Urinary Tract infection. There was significant association of source of information with pre-test knowledge regarding prevention of UTI in adolescent girl Conclusion: The research found that adolescent girl's poor knowledge score in pre-test regarding prevention of UTI. A mass awareness campaign is required for effective results in the about urinary tract infection.

Key words: effect, planned teaching programme, adolescent girls, urinary tract infection

Introduction

Today increasing emphasis is placed on health promotion, wellness, and self-care. Health is seen as resulting from a lifestyle that is oriented towards wellness. The result has been the evolution of a wide range of health promotion strategies, including life time health monitoring programmes, environmental health programmes, risk reduction and nutrition, and health education. Dissemination of health information is one of the ways of increasing knowledge on health and modification of behaviour, which is directed towards promotion of health and prevention of disease.¹ Adolescence is a period which is marked by the termination of childhood at one end and the beginning of adulthood at the other end. According to WHO the adolescent period is from 10-19 years, the second decade of life. It is characterized by rapid change in physical, biological and hormonal changes resulting in to psychosocial, behavioural and sexual maturation. Healthy adolescents are needed to develop the healthy nation.²

about 3% of girls and 1% of boy swill have a urinary tract infection by 11 years of age. Urinary tract infections are also common in female adolescents and young women; young women develop UTIs at more than 3 times the rate of young men. Urinary tract infection with poor self-esteem, impaired quality of life, social isolation and depression. Significantly this health problem is contributing to the overall morbidity of females in all ages of their life.³

Need Of The Study

Adolescence, which literally means, “to grow into maturity”, is generally regarded as the psychologic, social, and maturational process initiated by the pubertal changes. Health promotion for this adolescent age group mainly consists of teaching and guidance to avoid risk-taking activities and health-damaging behaviors. Adolescent period provides an opportunity to incorporate healthy lifestyle behaviors that will benefit themnot only during the teenage years, but also throughout the life span. The preventive measures for urinary tract infection among females especially among adolescent girls include maintaining good hygiene, proper emptying of bladder, maintain adequate fluid intake etc. Since the adolescent girls aremore prone to get the infectious diseases like urinary tract infection due to poor personal hygiene, irregular bladder emptying, that is why preventive measures for Urinary tract infection in adolescent girls are the best sample to do the study regarding the knowledge and preventive measures regarding urinary tract infection.⁵

The adolescent girls are going to become the matured adult women in future. If we are educating the adolescent girls regarding prevention of urinary tract infection, that will help them to prevent the occurrence and they can educate the other members also. So the researcher got interest to select adolescent girls as the sample of this study.

Methodology

The current research was designed to assess the **Effectiveness of planned health teaching programme on knowledge regarding prevention of Urinary Tract infection among adolescent girls of selected schools**. This research employed a Quantitative method, as well as a one group pre-test post-test research design. The research was carried out among 100 adolescent girls of selected schools in the City chosen using a non-probability purposive sampling technique. The information was gathered using a program that included demographic characteristics and Structured knowledge questionnaire. The scores were classified as poor knowledge (score 0-6), average knowledge (score 7-12), good knowledge (13-17 score) and excellent knowledge (score 18-25). Data collection is the process of recruiting participants and gathering information for a research. Administrative approval was acquired in writing. To ensure a truthful answer, the chosen participants were informed about the objective and use of the research and ensured of the anonymity of their replies. Each participant in the research provided written informed permission. SPSS Version 20 was used to analyse the data.

Results

Distribution of Demographic Variables according to age of adolescent girls from selected schools, 21 % of them were from group 12-13 years, 48% were from the group 14-15 years of age and 31% adolescent girls from the age group 16-17 years of age. Educational Qualification According to educational qualification of adolescent girls from selected schools, 22% of them were from 8th standard, 38% of them from 9th standard and 40% adolescent girls were from 10th standard. Source of information regarding urinary tract infection in the study, according to source of information regarding urinary tract infection of adolescent girls from selected schools, 48% of them answered from mothers, 13% of them from friends, 14% of them answered from mass media and 25% of them answered from other sources. Past experience of Urinary tract infection to the question do you have any past experience of urinary tract infection, 16% of adolescent girls from selected schools answered burning micturition, 15% of them answered pain in lower abdomen, 60% of them answered no experience and 9% of them answered all of above.

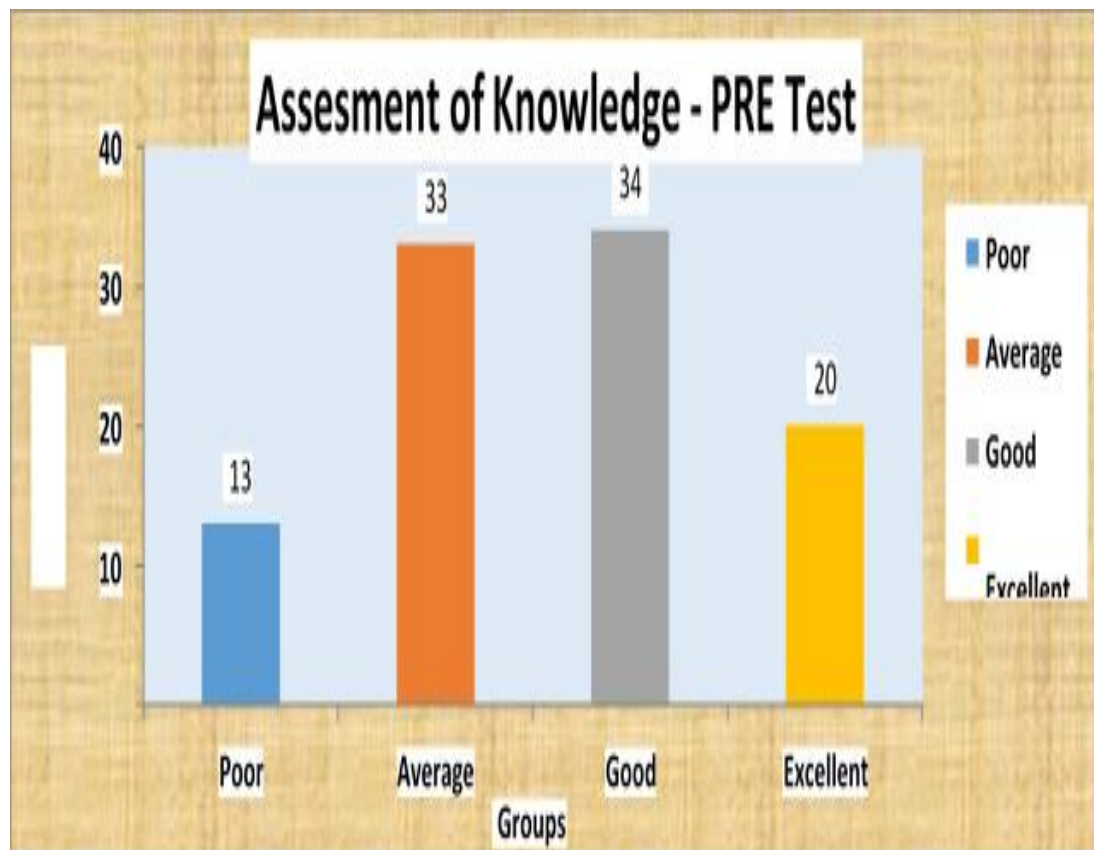
SECTIONII:-Deals with analysis of data related to assessment of the level of knowledge regarding prevention of Urinary Tract infection among adolescent girls of selected schools.

Table 1: General assessments level of knowledge regarding prevention of Urinary Tract infection among adolescent girls-PRE

Groups	Score	Frequency	Percentage
Poor	0-6	13	13.00
Average	7-12.	33	33.00
Good	13-17	34	34.00
Excellent	18-25	20	20.00

Knowledge PRE	Min	Max	Mean	SD
	5	23	13.12	4.57

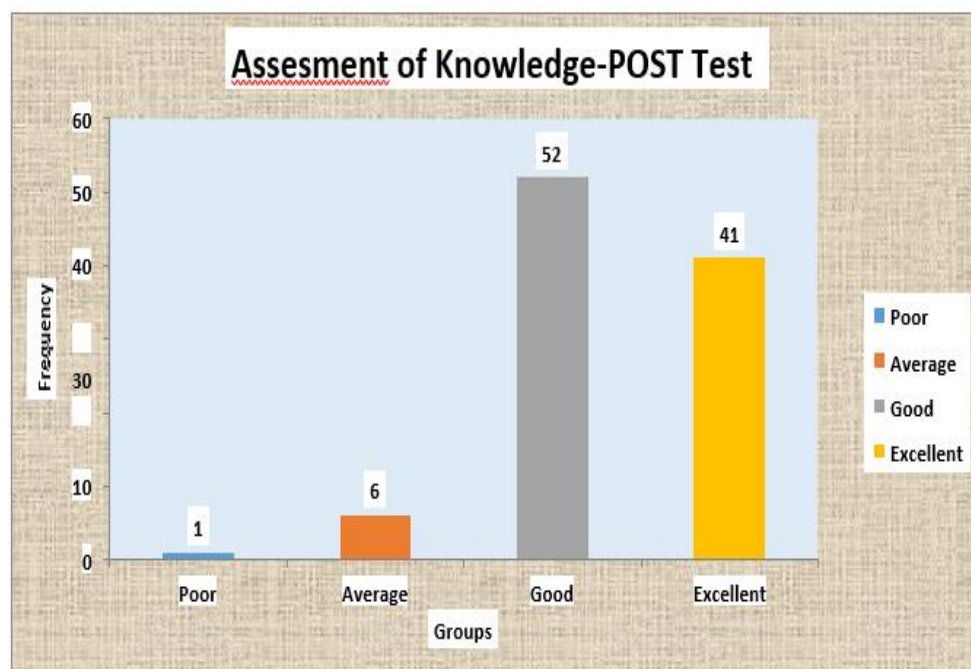
At the time of pre-test, 13% of the adolescent girls of selected schools had poor knowledge, 33% of the adolescent girls had average, 34% of them had good knowledge and 20% had excellent knowledge regarding prevention of Urinary Tract infection. Average knowledge regarding prevention of Urinary Tract infection at pre-test was 13.12 with standard deviation of 4.57. The minimum score of knowledge was 5 with maximum score of 23. Figure No-1 General assessments level of knowledge regarding prevention of Urinary Tract infection.

**Figure No- 1: General assessments level of knowledge regarding prevention of Urinary Tract infection**

General assessments level of knowledge regarding prevention of Urinary Tract infection among adolescent girls–POST

Groups	Score	Frequency		Percentage
Poor	0-6	1		1.00
Average	7-12.	6		6.00
Good	13-17	52		52.00
Excellent	18-25	41		41.00
Knowledge POST	Min	Max	Mean	SD
	6	25	18.32	4.11

At the time of post-test, 1% of the adolescent girls of selected schools had poor knowledge, 6% of the adolescent girls had average, 52% of them had good knowledge and 41% had excellent knowledge regarding prevention of Urinary Tract infection. Average knowledge regarding prevention of Urinary Tract infection at post-test was 18.32 with standard deviation of 4.11. The minimum score of knowledge was 6 with maximum score of 25.



SECTION - III

Deals with analysis of data related to effectiveness of planned health teaching programme on knowledge regarding prevention of Urinary Tract infection among adolescent girls of selected schools.

SECTION IV

Deals with analysis of data related to association between pre-test knowledge score regarding prevention of UTI in adolescent girls at selected schools with selected demographic variables. There was significant association of source of information with pre- test knowledge regarding prevention of UTI in adolescent girls.

Discussion

Any research study be considered complete till the research findings have been propagated among concerned fraternity and other significant people. This chapter deals with a brief summary of findings, discussion, conclusion, implications and recommendations of the study. The study we conducted with the purpose to

effectiveness of planned health teaching programme on knowledge regarding prevention of Urinary Tract infection among adolescent girls of selected schools. Similar study was found. Shiva Balasubramanian, et.al, 2022 In treating lower urinary tract symptoms (LUTS), the risk of overtreatment with antibiotics must be reconciled with the risk of an untreated urinary tract infection (UTI) progressing to acute pyelonephritis (APN). Using Cerner Health Facts, a longitudinal clinical informatics database, we aimed to determine risk factors associated with the development of APN from UTI in an effort to guide the initiation of empiric antibiotics. In this study the method We queried the Cerner Health Facts database for women over age 18 with a positive urine culture. Any patient with an International Classification of Disease (ICD) code indicating chronic pyelonephritis was excluded. Development of APN within 30 days of the positive culture, specified by ICD coding, was our primary outcome. Patient and facility factors were assessed as potential risk factors for the development of APN using multivariable regression. The results Out of 58 344 women with a positive urine culture, 3.9% (2296) developed APN. Mean patient age was 54.4 ± 25.3 years. Overall, 12 variables were predictive for APN and 11 variables were protective against APN. Presence of obstructive and reflux uropathies (OR 4.58), presentation to an acute care facility (OR 3.19), urinary retention (OR 2.30), history of UTI (OR 2.19), and renal comorbidities (OR 2.07) conferred the highest odds of APN development. The most protective variable against APN development was cognitive impairment (OR 0.49). Conclusions is Identified risk factors associated with APN development may aid decisions regarding empiric antibiotic initiation for patients presenting with LUTS while awaiting urine culture results. The relationship between cognitive impairment and progression to APN deserves further study.

Conclusion

The researcher felt deep sense of satisfaction and fulfilment at having undertaken the study. The study provided deeper insight and empathy towards the needs of the expert guidance from the guide and co-operation of teachers has made the study a fruitful and pleasant experience. Most research on UTIs has focused on adult women, with limited research on adolescent girls. This study is specifically address the knowledge and practices of adolescent girls regarding UTI prevention, a population that is particularly vulnerable to UTIs. The use of a planned health teaching program to improve knowledge regarding UTI prevention is a relatively new approach. This study evaluates the effectiveness of a structured and comprehensive health teaching program in improving UTI prevention knowledge.

Acknowledgement: The researcher would like to acknowledge the ethical committee and authorities of selected urban area and all the participants for their support in the study.

Financial support and sponsorship: This was a self-funded study.

Conflict of interest: There are no conflicts of interest.

References

- [1] Smeltzer C S, Brenda B: Textbook of Medical-Surgical Nursing, 10th edition. Philadelphia; Lippincott Williams and Wilkins publications; 2014.page no 6, 320-1
- [2] Stammer W E, Hooton T.M: Management of urinary tract infection in adolescents. NEMG J med.2009; page no 329, 1328.
- [3] David Wilson, Marilyn j, Hockenberry: Wong's essentials of pediatric nursing, 8th edition, Noida, Elsevier publications; 2009; page no: 950,951.
- [4] Foxman B: Epidemiology of urinary tract infections: Incidence, morbidity and economic costs.J.urol.2009. Jan: 189(5):1896-89.
- [5] Jha B K, Singh Y.I.: Prevalence of asymptomatic bacteriuria in adolescent children in pokhara valley.Jha pediatr.2015 June 692-75-78.
- [6] Shiva Balasubramanian , Xi Wang , Suman Sahil , An-Lin Cheng , Gary Sutkin , Jonathan
- [7] P Shepherd, 2022 Sep;41(7):1582-1589. 'Risk factors for the development of acute pyelonephritis in women with a positive urine culture.' doi: 10.1002/nau.25005. Epub 2022 Jul5. PMID: 35788978, DOI: 10.1002/nau.25005