



A Study to Assess the Knowledge Regarding Urinary Tract Infection among Adolescent Girls of Karthika Thirunal Government Vocational & Higher Secondary School for Girls, Manacaud, Thiruvananthapuram

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Greentree Group

Received: 31.05.2017

Edited : 10.07.2017

Accepted: 10.07.2017

Published: 15.07.2017



ABSTRACT

Urinary tract occurs in any part of the urinary system. It is one of the most common microbial diseases encountered in medical practice affecting people of all ages. Worldwide prevalence of urinary tract infections was estimated to be around 150 million persons per year. Our study is to assess the knowledge regarding urinary tract infection among adolescent girls in higher secondary section of Karthika Thirunal Govt. Vocational & Higher Secondary School for Girls, Manacaud, Thiruvananthapuram. The study objectives are to assess the knowledge of adolescent girls regarding urinary tract infection and determine the association between knowledge regarding urinary tract infection and selected demographic variables.

The hypothesis is there will be a significant association between level of knowledge regarding urinary tract infection with selected demographic variables. By convenient sampling technique, we selected 60 samples of students from higher secondary section of Karthika Thirunal Government. Vocational & Higher Secondary School for Girls, Manacaud, and Thiruvananthapuram.

The data was analyzed by inferential and descriptive statistics. The findings reveals that there is a significant statistical relationship between level of knowledge and demographic variables such as age, area of residence, socio-economic status, voiding during school hours and cleanliness of toilets in school.

The research findings can be implemented on Nursing Service, Nursing Education, Nursing Administration and Nursing Research.

KEYWORDS

Urinary tract infection, Knowledge, Adolescent girls, Secondary School for Girls

INTRODUCTION

World Health Organization (WHO) identifies adolescence as the period in human growth and development that occurs after childhood and before adulthood, from ages 10 to 19. Adolescence is a stage between childhood and adulthood. It represents one of the critical transitions in the lifespan and is characterized by a tremendous pace in growth and change that is second only to that of infancy. In India 28% of total population comprise adolescents.

A Dutch National survey of general practice conduct on 2006 to find the incidence rates and management of urinary tract infection among 82,053 children aged 0-18 years showed that 1.15% was diagnosed as having urinary tract infection and the incidence rates were 19 episodes per 1000 persons per year. Incidence rates in girls were 8 times higher than boys which gradually increased after the age of 12 years.

Urinary tract infection is the leading cause of morbidity and health care expenditures in persons of all the ages. Symptoms of



urinary tract infection include frequent feeling or need to urinate, pain during urination, fever, pelvic pain and cloudy urine. The most common cause for the infection is unhygienic toilets where the bacteria are usually found. *Escherichia coli* (*E.coli*) (80-85%) which is normally present in the cell lining of the urinary tract and gastrointestinal tract, which is the commonest causative organism. Other gram negative colonic bacteria have been gaining prominence in India over the last two decades (Acharya and Jadan 1980). The long range consequences of ignoring urinary tract infection can lead to kidney failure, septicemia, bacterial endocarditis, prostatitis and infertility.

NEED AND SIGNIFICANCE

Lower urinary tract infections are very common among adolescent girls. Compared to boys, the recurrence rate is 50% greater in girls, because of shorter urethra and anatomical proximity of the urethra to rectum.

Among adolescent girls, poor hygiene and dysfunctional voiding pattern increases the risk for urinary tract infection. Lack of adequate knowledge regarding menstrual hygiene may predispose to urinary tract infection. Silent urinary tract infection may occur among school girls due to inadequate intake of water and infrequent passage of urine. The major reason for this is

unhygienic school toilets and improper teaching regarding menstrual hygiene.

The study aimed to evaluate prevention program on knowledge and habitual practices regarding prevention of urinary tract infection among female adolescents. Prevention and management of genitourinary tract infection which includes; improving knowledge of genitourinary tract physiology, reasons for genitourinary infections, complications and proper health habits like good personal hygiene, drinking plenty of water which flush out the bacteria out of the urinary tract, emptying bladder completely soon as feel the urge, wear cotton undergarments, changing sanitary pads frequently during menstruation.

Learning about healthy behavior can affect their susceptibility to the disease. Genitourinary tract infections can be prevented by appropriate healthy behaviors. Adolescent girls in all communities also need to acquire proper healthy behaviors in order to learn and practice healthy life style, maintain health and prevent disease.

Therefore additional medical researches are necessary to improve urinary tract infection prevention and care strategy. Hence the investigator felt the need to conduct a study to assess the knowledge regarding urinary tract infection among



adolescent girls and to initiate early educational intervention to investigate urinary tract infection and its problems among adolescent girls and also later in their lives.

STATEMENT OF THE PROBLEM

“A study to assess the knowledge regarding urinary tract infection among adolescent girls of Karthika Thirunal Govt. Vocational & Higher Secondary School for Girls, Manacaud, Thiruvananthapuram.”

OBJECTIVES

- To assess the knowledge of adolescent girls regarding urinary tract infection.
- To determine the association between knowledge regarding urinary tract infection and selected demographic variables.

HYPOTHESIS

H1: There will be a significant association between level of knowledge regarding urinary tract infections with selected demographic variables.

METHODOLOGY

RESEARCH DESIGN

The present study was intended to assess the knowledge regarding urinary tract infection among adolescent girls of Karthika Thirunal Govt. Vocational & Higher Secondary School for Girls, Manacaud, Thiruvananthapuram.

A non-experimental descriptive survey design is used for the study. It includes two sections, the first section deals with socio demographic data and the second section consists of questionnaire for assessing the knowledge regarding urinary tract infection among adolescent girls.

SETTING OF THE STUDY

The study was conducted at Karthika Thirunal Government Vocational & Higher Secondary School for girls, Manacaud, Thiruvananthapuram. The availability of the sample is easy, accessibility of investigator were the reason for setting.

POPULATION OF THE STUDY

Students studying in plus two (16-17 years)

SAMPLING TECHNIQUE

Convenient sampling technique has used for the study.

SAMPLE SIZE

The sample for the study consisted of **60** students.

SELECTION CRITERIA

Inclusion criteria

- Adolescent girls who are willing to participate in the study.
- Adolescent girls of higher secondary section who are present during data collection.

Exclusion criteria



➤ Adolescent girls who had attended urinary tract infection related classes within 6 months.

TOOL

The tool for data collection consists of two sections:

Section A: Demographic variables.

Section B: Self-administered questionnaire to assess knowledge regarding urinary tract infection.

MAJOR FINDINGS

In our study **40%** adolescent girls have poor knowledge, **35%** have average knowledge and **25%** have good knowledge regarding urinary tract infection. On analysis of data there is a significant statistical relationship between the level of knowledge and selected demographic variables such as age, area of residence, socio economic status, voiding during school hours and cleanliness of toilets in schools. But there is no statistical relationship between education of mother and sources of information.

CONCLUSION

Urinary tract infections are one of the most common bacterial infection seen in primary care .Urinary tract infection is defined as the presence of microbial pathogens in the urinary tract with associated symptoms. Our study is to assess the knowledge regarding urinary

tract infection among adolescent girls of Karthika Thirunal Government Vocational & Higher Secondary School for Girls, Manacaud, Thiruvananthapuram.

The following objectives were set for the study:-

➤ To assess the knowledge of adolescent girls regarding urinary tract infection.

➤ To determine the association between knowledge regarding urinary tract infection and selected demographic variables.

The major findings of the study were presented under the following sections:-

Section A: Demographic variables

Section B: Analysis of knowledge

Analysis reveals that 40% adolescent girls have poor knowledge, 35% have average knowledge and 25% have good knowledge regarding urinary tract infection.

NURSING IMPLICATIONS

The findings of the study can be implicated in various areas of nursing including nursing education, nursing services, nursing administration and nursing research through in-service education and course awareness regarding various health problems.

NURSING SERVICES

1) Nurses play a vital role in caring patients with urinary tract infection by nursing interventions and also in the



prevention of urinary tract infection and its reoccurrence especially in adolescent girls. There is an acute need to have a special training program for nursing students, so that they can utilize their knowledge and practice for early identification of signs and symptoms of urinary tract infection.

2) School focused urinary tract infection awareness programs that include health education to adolescent girls regarding prevention and management of urinary tract infection since they are at the reproductive age.

3) Nurse working in medical units of the hospital can use this knowledge to educate patients about the importance of knowledge regarding urinary tract infection and its preventive measures.

4) Community focused urinary tract infection awareness programs that include health education in homes regarding prevention and management of urinary tract infection.

NURSING EDUCATION

1. Teaching program is one of the educational interventions that can be included in the nursing curriculum.

2. Continuing education can be conducted for the nurses to educate the adolescents regarding the prevention and management of urinary tract infection.

NURSING RESEARCH

1. Nursing research essentially is a problem solving process. Nurses have to gather information regarding facts, ethical issues about urinary tract infection and change practices based on scientific knowledge.

2. Similar study can be replicated on a large scale.

NURSING ADMINISTRATION

Nursing administrators play an important role in the supervision and management of nursing professionals in order to improve their knowledge, skills and make them aware of the latest advancement in the technology to prevent urinary tract infection.

RECOMMENDATIONS

❖ Similar study can be conducted with large number of samples and in different settings.

❖ Similar study can be done as experimental method.

❖ The study can be implemented in community setting in co-operating various age groups.

❖ This study result can be compared with other similar study to evaluate study result and for future analysis.



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