



An explorative study on the knowledge of adolescent girls regarding prevention of urinary tract infection in a selected nursing college, Belagavi

Neelu Aryal¹⁻² and Dr. Preeti R Bhupali³

¹Department of Nursing, KLE Academy of Higher Education and Research, Institute of Nursing Sciences, Belagavi, Karnataka, India

²Faculty of Nursing, Bharatpur Hospital Nursing College, Bharatpur, Chitwan, Nepal (NAMS)

³Professor and Dean, KLE Academy of Higher Education and Research, Institute of Nursing Sciences, Belagavi, Karnataka, India

Corresponding Author: Neelu Aryal

DOI: <https://www.doi.org/10.33545/nursing.2025.v8.i1.G.504>

Abstract

Adolescence is the transitional phase of growth and development between childhood and adulthood. Urinary Tract Infection is one of the most common problem among adolescents. A descriptive survey approach was used among forty nursing students studying in KAHER institute of nursing sciences to assess the knowledge regarding prevention of urinary tract infection. A self structured knowledge questionnaire was used for data collection. Findings of the study showed that Majority 21 (52.5%) of the participants has the average knowledge scores regarding prevention of urinary tract infection, 9 (22.5%) has poor knowledge score and 10 (25%) has good knowledge scores.

Keywords: Adolescent girls, knowledge, prevention of urinary tract infection

Introduction

Adolescence is the transitional phase of growth and development between childhood and adulthood. The World Health Organization (WHO) defines an adolescent as any person between ages 10 and 19 ^[1]. Adolescents are encountered by reproductive and sexual health problems which include Urinary Tract Infection, nutritional problems, mental health problems, substance abuse, injuries and accidents, acute and chronic diseases. Among them Urinary Tract Infection is one of the most common problem among adolescents. Urinary tract infection (UTIs) are the second most common bacterial disease and the most common bacterial infection in women, with at least onethird of women developing a UTI before the age of 24. During their lifetime, more than half of women will have a UTI and up to 50% of these will have another infection within a year. Inflammation of urinary tract may be attributed to a variety of disorders, but bacterial infection is the most common. Escherichia coli is the most common pathogen causing a UTI, and primarily seen in women. Bacterial counts of 10⁵ colony-forming units per milliliter or higher typically indicates a clinically significant UTI ^[2]. In a prospective study of acute UTIs in young women, the incidence was 0.5-0.7 per year. Recurrent infections become a problem in 25%-30% of women who experience an initial infection ^[3]. In the study conducted among 100 adolescent girls in Central Pendam, majority i.e. 88(88%) had moderate knowledge and 12(12%) had low knowledge and none of them had high knowledge on preventive measures of urinary

tract infection ^[4]. In the study conducted in nursing students of 1st year BSc nursing residing in the selected hostel of a nursing college, majority of the subjects had average knowledge on prevention of UTI {33 (40.2%)}, whereas a few had good knowledge {23 (28%)} ^[5]. Adolescent are the future leader who runs the nation in the coming years. In order to develop the healthy nation, the health of the adolescent is the key element

Objectives of the study

To assess the knowledge of adolescent girls regarding prevention of urinary tract infection and find the association of knowledge scores of adolescent girls on prevention of urinary tract infection with their selected socio demographic variables.

Research Methodologies

A descriptive survey approach was used to assess the knowledge of adolescent girls regarding prevention of urinary tract infection in the selected nursing college, Belagavi. Sample of 40 nursing students studying in KAHER institute of nursing sciences was selected as a sample of the study by using convenient sampling technique. A self structured knowledge questionnaire was used for data collection. Students who were present during the study and who were willing to participate in the study were included in the study. Data was collected after obtaining the permission from the concerned authorities.

Results

Section 1: Analysis and Interpretation of Demographic Variables

Table 1: Frequency and percentage distribution of participants according to Demographic variables. (n=40)

S. No.	Demographic Variables	Frequency (f)	Percentage (%)
1.	Age (in years)		
	17-18	2	5
	19-20	38	95
2.	Family Income (Rs.)		
	Below 5000	1	2.5
	5001-7000	6	15
	7001-9000	8	20
3.	Type of family		
	Joint Family	9	22.5
	Nuclear Family	31	77.5
4.	Dietary Pattern		
	Vegetarian	3	7.5
	Non vegetarian	37	92.5
5.	Source of information prevention of UTI regarding		
	Mass media	6	15
	Newspaper	4	10
	Friends/relatives	3	7.5
	Course of study	27	67.5
6.	History of UTI		
	Yes	6	15
	No	34	85

Table 1 indicates that a majority 38 (95%) of the participants in the study belongs to age of 18-19 years whereas minority 2 (5%) belongs to 16-17 years. Majority 25 (62.5%) have the family income above 9000, 8 (20%) of them had 7001-9000, 6 (15%) had 5001-7000 and minority 1 (2.5%) have family income below 5000. Majority 31 (77.5%) lives in nuclear family, 9 (22.5%) lives in joint family. Majority 37 (92.5%) are non-vegetarian and minority 3 (7.5%) are vegetarian. Majority 27 (67.5%) has got the information regarding prevention of UTI through course of study, 6 (15%) has got through mass media, 4 (10%) has got through newspaper and minority 3 (7.5%) has got through friends/relatives. Majority 34 (85%) has no any history of UTI and minority 6 (15%) has the history of UTI.

Section II: Analysis and interpretation of knowledge scores of the participants regarding prevention of Urinary Tract Infection.

Table 2: Frequency and Percentage distribution of knowledge scores of nurses (n=40)

Knowledge score	Frequency (f)	Percentage (%)
Poor (0-5)	9	22.5
Average (6-12)	21	52.5
Good (13-20)	10	25

Table 2 shows that majority 21 (52.5%) has the average knowledge scores regarding prevention of urinary tract infection, 9 (22.5%) has poor knowledge score and minority 10 (25%) has good knowledge scores regarding prevention of urinary tract infection.

The study reveals that there is no association between the knowledge scores regarding prevention of urinary tract

infection and socio demographic variables such as age, family income, type of family, dietary pattern, source of information regarding UTI and history of UTI.

Discussion

In the study, majority 38 (95%) of the participants in the study belongs to age of 18-19 years where as minority 2 (5%) belongs to 16-17 years. Majority 25 (62.5%) have the family income above 9000, 8 (20%) of them had 7001-9000, 6 (15%) had 5001-7000 and minority 1 (2.5%) have family income below 5000. Majority 31 (77.5%) lives in nuclear family, 9 (22.5%) lives in joint family. Majority 37 (92.5%) are non vegetarian and minority 3 (7.5%) are vegetarian. Majority 27 (67.5%) has got the information regarding prevention of UTI through course of study, 6 (15%) has got through mass media, 4 (10%) has got through newspaper and minority 3 (7.5%) has got through friends/relatives. Majority 34 (85%) has no any history of UTI and minority 6 (15%) has the history of UTI.

In the study, majority 21 (52.5%) has the average knowledge scores regarding prevention of urinary tract infection, 9 (22.5%) has poor knowledge score and minority 10 (25%) has good knowledge scores regarding prevention of urinary tract infection.

In the study, p value for all the demographic variables such as age, family income, type of family, dietary pattern, source of information regarding UTI and history of UTI is greater than 0.05. It shows there is no association between the knowledge scores regarding prevention of urinary tract infection and socio demographic variables.

Conclusion

Findings of the study showed that Majority 21 (52.5%) of the participants has the average knowledge scores regarding prevention of urinary tract infection, 9 (22.5%) has poor knowledge score and minority 10 (25%) has good knowledge scores regarding prevention of urinary tract infection. It also showed that there is no association between the knowledge scores regarding prevention of urinary tract infection and socio demographic variables

Limitations

The study is limited to adolescent girls of Bsc nursing 1st year studying in KAHER Institute of Nursing Sciences, Belagavi.

Conflict of Interest

Not available

Financial Support

Not available

References

- Available from URL: <https://www.britannica.com/science/adolescence>.
- Lewis SL, Heitkemper MM, Dirksen SR, O'Brien PG, Bucher L. Medical Surgical Nursing. 7th ed. New Delhi: Elsevier; [year unknown]. p. 1155.
- Stamm WE, Norrby SR. Urinary tract infections: disease panorama and challenges. The Journal of Infectious Diseases. 2001;183(Supplement_1):S1-S4. Available from URL:

https://academic.oup.com/jid/article/183/Supplement_1/S1/2190986

4. Sherpa SZ, Rai N, Giri S, Dhakal K, Lepcha KW, Subba CH, *et al.* Knowledge, attitude and hygienic practice towards preventive measures of urinary tract infection among adolescent girls of selected rural areas Sikkim. *International Journal of Advances in Nursing Management.* 2022;10(1):1–5. DOI: 10.52711/2454-2652.2022.00001. Available from: <https://ijanm.com/AbstractView.aspx?PID=2022-10-1-1>
5. Sequera SKL, *et al.* Urinary Tract Infection—Knowledge and Habitual Practices among Adolescent Girls Residing in College Hostel of Mangaluru, India: A Cross-sectional Study. *Journal of Clinical and Diagnostic Research.* 2021 Jul;15(7):LC05–LC08. DOI: 10.7860/JCDR/2021/45707.15152. Available from: [https://www.jcdr.net/articles/PDF/15152/45707_CE\[Ra1\]_F\[IK\]_PF1\(SY_SHU\)_PFA\(SY_AnK_KM\)_PN\(KM\).pdf](https://www.jcdr.net/articles/PDF/15152/45707_CE[Ra1]_F[IK]_PF1(SY_SHU)_PFA(SY_AnK_KM)_PN(KM).pdf)

How to Cite This Article

Aryal N, Bhupali PR. An explorative study on the knowledge of adolescent girls regarding prevention of urinary tract infection in a selected nursing college, Belagavi. *International Journal of Advance Research in Nursing.* 2025;8(1):539-541

Creative Commons (CC) License

This is an open-access journal, and articles are distributed under the terms of the Creative Commons Attribution-Non Commercial-Share Alike 4.0 International (CC BY-NC-SA 4.0) License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.