



CYSTITIS IN WOMEN: A SINGLE CENTRE EXPERIENCE IN SRI LANKA

Anurudda Udaya Bandara Pethiyagoda^{1*}, Kalyani Pethiyagoda² and Jinali Pabodha Manchanayake¹

¹Department of Surgery, Faculty of Medicine, University of Peradeniya, Sri Lanka.

²Department of Community Medicine, Faculty of Medicine, University of Peradeniya, Sri Lanka.

*Corresponding Author: Dr. Anurudda Udaya Bandara Pethiyagoda

Department of Surgery, Faculty of Medicine, University of Peradeniya, Sri Lanka.

Article Received on 03/05/2019

Article Revised on 23/05/2019

Article Accepted on 13/06/2019

ABSTRACT

Introduction: Urinary tract infection is the infection of any part of the urinary tract. Sexual activity may be responsible for high infection rate in sexually active women as honeymoon cystitis begins once the women become sexually active. **Materials and Methods:** This descriptive cross-sectional study was conducted among health care workers at teaching hospital, Peradeniya, Sri Lanka to obtain the prevalence of honeymoon cystitis among sexually active women and their practices. **Results:** Of 110 subjects (30.8 ± 5.026 years), 63.6% had experienced urinary tract infection at least once in their lifetime. 18.57% of sexually active women had experienced urinary tract infection after the sexual activity. There is a significant association between presence of urinary tract infection and the type of soap used to clean genital area ($p < 0.05$). **Conclusions:** A large number of subjects had experienced urinary tract infection at least once in their lifetime. Furthermore, 18.57% of sexually active women had experienced urinary tract infection after the sexual activity. Further studies should be continued over the large sample size.

KEYWORDS: Urinary tract infection, Sexually active women, Incidence, Practices, Sri Lanka.

INTRODUCTION

Urinary tract infection is the infection of any part of the urinary tract. The urinary tract consists of the kidneys, ureters, bladder and urethra. Any part of these structures of urinary tract can get infected. But bladder and urethral infections are more common than the others. Infection in the bladder is known as cystitis while that of the urethra is known as urethritis.^[1]

There is a chance to get honeymoon cystitis when a woman has sex for the first time, or when a woman has sex after a long period of time without any sexual activity. During this, *Escherichia coli* bacteria which tend to live on the skin around the anus can enter the urethra.^[2]

Bacteria can enter the urinary system through the urethra or the blood stream.^[3] Poor toilet habits, pregnancy in women are some of the causes for these infections. The aetiologic and clinical presentation of urinary tract infection is similar in both industrialized and developing nations. But the range of infections differs from one place to the others.^[4]

It is believed that sexual activity may be responsible for high infection rate in sexually active women as the problem begins once the women become sexually active. Urinary tract infections are most common in sexually

active women and increase in people with diabetes. A common cause of UTI is an increase in sexual activity such as vigorous sexual intercourse with a new partner.

Women are more prone to urinary tract infections than males because their urethra is much shorter and closer to the anus than in males. Prostatic secretion in males has more bacteriostatic properties which are not present in women.^[5] This study was done to find out the prevalence of urinary tract infections among sexually active women in Sri Lanka and their practices.

MATERIALS AND METHODS

Methodology

This descriptive cross-sectional study was conducted among health care workers at teaching hospital, Peradeniya, Sri Lanka to obtain the prevalence of honeymoon cystitis among sexually active women and their practices. It was conducted over three month period. Pregnant women were excluded for the study sample and 110 subjects who had given written informed consent were given a questionnaire in their mother-tongue. Data was analyzed using SPSS, version 20 statistical software. Frequencies and descriptive analysis was used to highlight the results of this study.

RESULTS AND DISCUSSION

A total number of 110 subjects were included in this study. All of them aged between 18 - 40 years and the

mean age of the sample was 30.8 ± 5.026 years. From that, 63.6% had experienced urinary tract infection at least once in their lifetime.

Table 01: Incidence of urinary tract infection.

	Frequency	Valid Percent
UTI absent	40	36.4
present	70	63.6
Total	110	100.0

18.57% of sexually active women had experienced urinary tract infection after the sexual activity. The

practices of women have had urinary tract infection are described in table 02, 03 and 04.

Table 02: Urination after sex.

	Frequency	Valid Percent
Never	4	6.7
Rare	17	28.8
occasionally	12	20.33
always	26	44.06
Total	59	100.0

Majority of women (85.71%), who had experienced urinary tract infection, reported that they urinate following sexual activity. Most of them (92.85%) use soap when they wash their genital area. 43.07% use baby soap and the others use various kinds of soaps which are

stronger detergent than baby soap. There is a significant association between presence of urinary tract infection and the type of soap used to clean genital area ($p < 0.05$).

Table 03: Association between presence of urinary tract infection and the type of soap used.

	Value	Degree of freedom	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.893 ^a	2	0.032
Likelihood Ratio	6.617	2	0.037
Linear-by-Linear Association	4.003	1	0.045
N of Valid Cases	110		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.45.

Table 04: Consulting health professional for urinary tract infection.

	Frequency	Valid Percent
No consultation	6	8.57
Physician	23	32.85
Urologist	18	25.71
Nephrologist	3	4.2
Family practioner	20	28.57
Total	70	100.0

The vast majority (91.42%) of females who had ever had a urinary tract infection reported contacting a health professional about their most recent attack.

experienced urinary tract infection, urinate following sexual activity.

According to previous estimates of incidence, A survey found a lifetime risk of urinary tract infection of 60.4% in females in United States.^[6] Another study done in United Kingdom, reported that 37% of the females interviewed have had at least one urinary tract infection in their lifetime.^[7] Healthy women who urinate within 15 minutes of sexual intercourse may be less likely to develop a urinary tract infection than women who do not urinate afterward.^[8] But our study does not support this opinion by showing majority of women who had

Based on the most thorough assessment of health-related quality of life in patients with cystitis to date, Michael et al. reported that the 36-Item Short Form Health Survey (SF-36) scores were lower in these patients compared to the healthy individuals across five of seven health-related quality of life dimensions including physical role, bodily pain, vitality, social functioning and mental health.^[9,10]

Healthy women who urinate within 15 minutes of sexual intercourse may be less likely to develop a urinary tract

infection (UTI) than women who do not urinate afterward.

CONCLUSIONS

Based on our findings, a large number of subjects had experienced urinary tract infection at least once in their lifetime. Of them, 18.57% of sexually active women had experienced urinary tract infection after the sexual activity.

ACKNOWLEDGEMENT

All subjects participated in this study and staff members of Teaching Hospital, Peradeniya, Sri Lanka who supported in data collection.

REFERENCES

1. Urinary tract infection in women; (2006) <http://familydoctor.org/online/famdocen/home/women/gen-health/190/html>
2. *What is Honeymoon Cystitis?*. (2019). Zava. Retrieved 15 May 2019, from <https://www.zavamed.com/uk/honeymoon-cystitis.html>
3. Macnair, I. (2006). Urinary Tract infection <http://www.bbc.co.uk/health/conditions/urinarytract2.shtml>
4. Latif AS. Urinogenital infections in the tropics [Internet]. [cited 2019 May 15]. Available from: <https://www.tropmed.org/wp-content/uploads/2018/05/chapter08.pdf>.
5. Thompson, T. (2006). Urinary Tract Infection Medication: Antibiotics for UTI. <http://www.nativeemidies.com/articles/urinary-tract-infection-medication-antibioticsuti.html>.
6. Foxman, B., Barlow, R., D'Arcy, H., Gillespie, B., & Sobel, J. (2000). Urinary Tract Infection. *Annals Of Epidemiology*, 10(8): 509-515. doi:10.1016/s1047-2797(00)00072-7
7. Butler, C., Hawking, M., Quigley, A., & McNulty, C. (2015). Incidence, severity, help seeking, and management of uncomplicated urinary tract infection: a population-based survey. *British Journal Of General Practice*, 65(639): e702-e707. doi:10.3399/bjgp15x686965
8. Does postcoital voiding prevent urinary tract infections in young women?. (2002). *The Journal Of Family Practice*, 51(11). Retrieved from <https://www.mdedge.com/familymedicine/article/60079/womens-health/does-postcoital-voiding-prevent-urinary-tract-infections>
9. Michael YL, Kawachi I, Stampfer MJ, Colditz GA, Curhan GC. Quality of life a month women with interstitial cystitis. *J Urol*, 2000; 164: 423e7.
10. (UK), N. (2012). Systematic review of health related quality of life for symptomatic UTI. *Royal College Of Physicians (UK)*. Retrieved from <https://www.ncbi.nlm.nih.gov/books/NBK11>