



CODEN [USA]: IAJPBB

ISSN: 2349-7750

INDO AMERICAN JOURNAL OF
PHARMACEUTICAL SCIENCES<http://doi.org/10.5281/zenodo.3893836>Available online at: <http://www.iajps.com>

Research Article

**URINARY PROBLEMS AND CAUSATIVE ORGANISMS IN
THE URINARY TRACT INFECTION BETWEEN PREGNANT
WOMEN****Dr Hassaan ul Hassan Tahir Ghazi, Dr Taufeeq Ahmed Khan,
Dr Muhammad Waqas Afzal
SKBZ/CMH Muzaffarabad AJK****Article Received:** April 2020**Accepted:** May 2020**Published:** June 2020**Abstract:**

Aim: To determine the frequency of urinary tract infections and common factors of urinary tract infection among symptomatic pregnant women and to determine the frequency of urinary tract infections among pregnant women.

Place and Duration: For six months from October 2019 to March 2020, Department of Urology and Department of Obstetrics and Gynaecology SKBZ/CMH Muzaffarabad AJK.

Methods: The study included 230 patients evaluated for urinary tract infection and related causative agents.

Results: Most patients were between 20 and 25 years old, i.e. 40.87% (n = 94), mean \pm sd 27.21 \pm 3.65 years, 19.13% (n = 44), 0, 23, 04% (n = 53) 1-2% between 26.53% (n = 61) 3-4% and 31.30% (n = 72) E z > 4, 89.13% (n = 205). Cola with 4.78% (n = 11) staph and 2.17% (n = 5) methicillin resistant staph, 44.35% (n = 102) with stress urinary incontinence, 66.96% (n = 154) urgent 38.70% (n = 89) and 32.17% (n = 74) with dysuria.

Conclusion: The outcomes of the study direct that the frequency of urinary tract infections and common causative factors as well as various symptoms of UTI in symptomatic pregnant women is high.

Key words: pregnant women, urinary tract infection, presentation & factors of urinary tract infection.

Corresponding author:**Dr. Hassaan ul Hassan Tahir Ghazi,**
SKBZ/CMH Muzaffarabad AJK

QR code



Please cite this article in press Hassaan ul Hassan Tahir Ghazi et al., *Urinary Problems And Causative Organisms In The Urinary Tract Infection Between Pregnant Women.*, Indo Am. J. P. Sci, 2020; 07(06).

INTRODUCTION:

Urinary tract infection is one of the most common diseases in clinical practice and its occurrence is common during pregnancy. Untreated, it can lead to serious maternal and fetal complications¹⁻². The urinary system undergoes deep physiological changes during pregnancy and facilitates the development of symptomatic and asymptomatic bacteremia in women. About 10 percent of people with symptomatic bacteraemia develop a urinary tract infection during pregnancy. Symptomatic bacteraemia occurs in the form of nocturia, stress urinary incontinence, urgent need, incomplete ejaculation and difficulty in evacuation³. The frequency of nocturia was 60.2%, stress incontinence 46.1%, urgency 34.1%, incomplete discharge 36%, as reported in recent international studies. Lower urinary tract symptoms during pregnancy may be due to pregnancy-related changes as well as urinary tract infections⁴⁻⁵. Detection of bacteremia should be considered an important part of prenatal care, and if the results are positive, it should be tested with urine culture and treated with appropriate oral antibiotics for 3-7 days. The percentage of urinary tract infections in pregnancy is 5-10 percent, and the most common causes of bacteremia during pregnancy are E.

Coli 84.99%, Staphylococcus Saprophyticus 5.66% and methicillin resistant Staphylococcus Aureus (3.77%). When a urinary tract infection enters the bladder and kidneys, a pregnant woman is at risk of hypertension, preeclampsia, anemia (low red blood cell counts), and amniotic inflammation⁶⁻⁷. Bladder and kidney infections increase the likelihood of premature delivery and low birth weight. As in our configuration, the incidence of women who come to the antenatal clinic with symptomatic bacteraemia is quite high, therefore when assessing the symptoms of urinary discomfort and early factors causing urinary tract infection, urine culture and treatment with appropriate antibiotics in the mother (renal impairment, septicemia) and fetal morbidity (prematurity, low birth weight) will decrease and patients will benefit⁸. We will also find out which of the most common organisms causes UTI in our local community. This will help you manage your patients better and create our practical guides.

MATERIALS AND METHODS:

This study was conducted at the Department of Urology and Department of Obstetrics and Gynaecology SKBZ/CMH Muzaffarabad AJK for six months from from October 2019 to March 2020.

In this study, 230 women of any equality with urinary discomfort included stress urinary incontinence (involuntary loss of urine during coughing and sneezing).), painful urination (discomfort, pain and burning sensation), nocturia (if patients wake up to urinate 3 or more times at night) and urgency (urinary incontinence) in prenatal clinics at the Fatima hospital. Women with previous kidney disease, immunosuppressants, kidney transplant patients, and patients who received antibiotics in the last two weeks were excluded from the study. The goal was to determine the frequency of urinary tract infections and common urinary tract infection factors among symptomatic pregnant women and to determine the frequency of various urinary tract infections among pregnant women.

Data collection and analysis: After obtaining informed consent, 230 patients selected by intentional, unlikely sampling were enrolled in the study. Demographic history obtained. All women were asked about nocturia, stress incontinence, impulse and painful urination. They underwent a complete urine test, and those with positive results (urinary tract infection marked as the presence of 10-15 purulent cells) are urine culture and susceptibility to finding the causative agent. The tests were carried out in the laboratory of Lahore Fatima Memorial Hospital. The collected data was entered into SPSS version 10 and analyzed using a statistical package. Quantitative variables, including age, were expressed as mean and standard deviation. Qualitative variables such as nocturia, stress incontinence, urgency, painful urination and urinary tract infection are presented in percentages and proportions. The collected information was analyzed to identify the most common causative agents of methicillin (Staphylococcus aureus), resistant to methicillin (Staphylococcus aureus) staphylococci.

RESULTS:

A total of 230 patients were enrolled in the study after meeting the on / off criteria to determine the frequency of urinary tract infection and the most common causes of urinary tract infection, and to determine the frequency of different presentations among symptomatic pregnant women. treatment of urinary tract infections in women. Woman. Most of the patients were between 20 and 25 years old, i.e. 40.87% (n = 94), 31.30% (n = 72), between 26 and 30 years old, 27.83% (= 64) in ages 31 and 35, mean \pm sd 27.21 \pm 3.65 years. was recorded. (Table 1)

Table 1: Age distribution of the patients (n=230)

Age (in years)	=n	%age
20-25	94	40.87
26-30	72	31.30
31-35	64	27.83

Mean and S.D= 27.21±3.65

The distribution of patients by parity was calculated and presented in Table 2, where 19.13% (n = 44) 0%, 23.04% (n = 53) 1-2%, 26.53% (n = 61) > 4% and 3-4% and between 31.30 (n = 72) (Table 2).

Table 2: Parity of the subjects (n=230)

Parity	=n	%age
Para 0	44	19.13
Para 1-2	53	23.04
Para 3-4	61	26.53
Para >4	72	31.30

The incidence of urinary tract infections and common urinary tract infections among symptomatic pregnant women was 89.13% (n = 205) with E. coli, 4.78% (n = 11) with staphylococcus and 2.17% (n = 5) with resistance. methicillin (table 3)

Table 3: Frequency of urinary tract infection and common causative agents of UTI among symptomatic pregnant women (n=230)

Causative agents	=n	%age
E-Coli	205	89.13
Staphylococcus	11	4.78
Methicillin resistant (staphylococcus aureus)	05	2.17

The frequency of urinary tract infections in pregnant women was 44.35% (n = 102) with stress urinary incontinence, 66.96% (n = 154) in emergency, 38.70% (n = 89) and 32.17 with dysuria (n = 74). (Table 4)

Table 4: Frequency of presentation of urinary tract infection and pregnant women (n=230)

Presentation	=n	%age
Stress urinary incontinence	102	44.35
Nocturia	154	66.96
Urgency	89	38.70
Dysuria	74	32.17

DISCUSSION:

Many women experience lower urinary tract symptoms during pregnancy, which can cause their nervousness and disability. The frequency of these symptoms varies considerably depending on the lower urinary tract complaints, the population used, and the terminology and definitions used in the study design⁹. The effect of pregnancy on lower urinary symptoms in women attracts the attention of researchers. It is assumed that anatomical and physiological changes affecting the lower urinary tract and hormonal millennium of pregnancy remain below the pathogenesis of lower urinary tract symptoms during pregnancy¹⁰. In our case, the frequency of women who came to the antenatal clinic with symptomatic bacteraemia was quite high, so we decided to assess the symptoms of urinary tract diseases and early diagnosis of urinary tract infections, urine culture. and treatment with appropriate antibiotics can reduce the risk of motherhood (kidney problems, sepsis) and fetal

morbidity (prematurity, low birth weight), and patients may benefit¹¹. Most patients were 20 to 25 years old, i.e. 27.21 ± 3.65 years ± 40.87 (n = 94), 89.13% of the most common causes of urinary tract infection in symptomatic pregnant women (n = 205) Urinary incontinence stress, 66.96% (n = 154) E.coli spasm, 4.78% (n = 11) staph and 2.17% (n = 5) methicillin-resistant Staphylococcus aureus, 44.35% incidence ZTI (n = 102), 38.70% (n = 89) and 32%, 17 (n = 74) tasks¹².

These findings are consistent with Levent T and E.col 84.99%, Staphlococcus Saprophyticus 5.66%, Staphlococcus Aureus methicillin resistant (3.77%) and subsequent nocturia in 60.2. %, stress incontinence 46.1%, urgency 34.1% and incomplete ejaculation 36%. In the Brazilian cohort of women in the third trimester of pregnancy, Scarpa and her colleagues reported a similar incidence of nocturia during pregnancy (80.6%). Defining nocturia as at least three-night spaces, Parboosingh and Doig

reported 66% of nocturia among 873 seemingly healthy prenatal women in the third trimester¹³. Cutner's nocturia prevalence of 23% among women whose pregnancy ended between the sixth and fifteenth week indicates that the incidence of nocturia differs not only by definition but also from gestational age. In this study, the incidence of nocturia ranged from 29.9% in the first trimester to 66.96% in the third trimester. In this study, the frequency found by 38.70% of study participants is also a common finding. Cutner et al. Chaliha et al. In his research he stated that it was urgently 62% and urgently 22.9% during pregnancy. In this pregnant population, the frequency of urinary incontinence was 44.35%, in these cases the cause was urinary incontinence¹⁴⁻¹⁵. Kristiansson and colleagues conducted a prospective, observational longitudinal and stress urinary incontinence study on 200 women who came to the antenatal prenatal clinic. Burgio et al. He assessed urinary symptoms in a mixed racial sample and showed that more white women reported statistically incontinence compared to black women, and the difference was due to the high incidence of urinary incontinence. white women The result of the study is that some pregnant women nearby can calmly become aware of the various lower urinary tract symptoms and providers associated with lower urinary tract disease and their ability to recognize, examine and control these symptoms. In addition, we identify the causes of the most common urinary tract infection in our local population that can help us better manage patients and develop practice guidelines.

CONCLUSION:

The results of the study show that the incidence of urinary tract infections and common causative agents as well as various signs of urinary tract infection among symptomatic pregnant women is high. However, it is recommended that every patient with urinary tract complaints during pregnancy develop symptoms that cause urinary tract infections. However, each configuration must be supervised to know the frequency of the problem.

REFERENCES:

1. Kaduma, Joshua, Jeremiah Seni, Clotilda Chuma, Richard Kirita, Fridolin Mujuni, Martha F. Mushi, Frank van der Meer, and Stephen E. Mshana. "Urinary Tract Infections and Preeclampsia among Pregnant Women Attending Two Hospitals in Mwanza City, Tanzania: A 1: 2 Matched Case-Control Study." *BioMed research international* 2019 (2019).
2. Omidifar, Navid, Erfan Taghi, Samane Mohebi, and Mohammad Motamedifar. "Distribution and antimicrobial susceptibility pattern of bacterial pathogens causing urinary tract infection in pregnant women in Shiraz, Southwest Iran." *Gene Reports* (2020): 100731.
3. Shaheen, Ghazala, Muhammad Akram, Farhat Jabeen, Syed Muhammad Ali Shah, Naveed Munir, Muhammad Daniyal, Muhammad Riaz et al. "Therapeutic potential of medicinal plants for the management of urinary tract infection: A systematic review." *Clinical and Experimental Pharmacology and Physiology* 46, no. 7 (2019): 613-624.
4. Al-Kashif, Mirfat Mohamed Labib. "Urinary Tract Infection among Pregnant Women and its Associated Risk Factors: A Cross-Sectional Study." *Biomedical and Pharmacology Journal* 12, no. 4 (2019): 2003-2010.
5. Al-Saadi, Mohammed AK, Nadia Al-Hilli, and Nazar A. Sheriff. "Influence of TLR4 Polymorphisms on Susceptibility to UTI Caused by Gram Negative Bacteria in Pregnant Women." *Indian Journal of Forensic Medicine & Toxicology* 13, no. 4 (2019): 1140-1144.
6. Belete, Melaku Ashagrie, and Muthupandian Saravanan. "A Systematic Review on Drug Resistant Urinary Tract Infection Among Pregnant Women in Developing Countries in Africa and Asia; 2005–2016." *Infection and Drug Resistance* 13 (2020): 1465-1477.
7. Owolabi, Akinyomade, Oludolapo Olatinsu, Adedapo O. Omolade, and Ilochi Ifeanyi. "Prevalence of Urinary Tract Infection among Adult Females in Omu-Aran South-West Nigeria." *South Asian Journal of Research in Microbiology* (2020): 16-24.
8. Soliman, Amany A., Adel S. Hussein, and Ahmed G. Ahmed. "Assessment and Management of Asymptomatic Bacteriuria in Pregnancy." *The Egyptian Journal of Hospital Medicine* 75, no. 1 (2019): 1982-1986.
9. Hussein, Hussein Abdulzahra, Lamyaa Jaber Hassan, Sharif Fadhil Al-Alawachi, Mohammed Saeed Sharif Al-Alawachi, and Ali Sharif Al-Alawachi. "Catheter Associated Urinary Tract Infections in Pregnant Women." *Journal of University of Babylon for Pure and Applied Sciences* (2019): 231-243.
10. Dhore, Mayank R., and Asha R. Jha. "Antimicrobial activity of *Allium cepa* and *Cinnamomum zeylanicum* against common bacteria causing urinary tract infections: in vitro study." *International Journal of Basic & Clinical Pharmacology* 8, no. 6 (2019): 1185.
11. Marami, Dadi, Senthilkumar Balakrishnan, and Berhanu Seyoum. "Prevalence, Antimicrobial Susceptibility Pattern of Bacterial Isolates, and Associated Factors of Urinary Tract Infections among HIV-Positive Patients at Hiwot Fana Specialized University Hospital, Eastern Ethiopia." *Canadian Journal of Infectious Diseases and Medical Microbiology* 2019 (2019).

12. Lakhani, Jitendra D., Sucheta J. Lakhani, Meera Shah, Panchasara Sanket, and Sandeep Jain. "Appropriate use of antimicrobial agents in urinary tract infections: Perception of physicians and resident doctors." (2019).
13. Mama, Mohammedaman, Aseer Manilal, Tigist Gezmu, Aschalew Kidanewold, Firew Gosa, and Atsede Gebresilasie. "Prevalence and associated factors of urinary tract infections among diabetic patients in Arba Minch Hospital, Arba Minch province, South Ethiopia." *Turkish journal of urology* 45, no. 1 (2019): 56.
14. Navarro, Annalyn, Joanna Marie Sison, Royces Puno, Teddy Quizon, Lee Jasper John Manio, Jeanelle Gopez, Raphael Enrique Tiongco, and Reynaldo Bundalian Jr. "Reducing the incidence of pregnancy-related urinary tract infection by improving the knowledge and preventive practices of pregnant women." *European Journal of Obstetrics & Gynecology and Reproductive Biology* 241 (2019): 88-93.