



## KNOWLEDGE AND PRACTICE ON PREVENTION OF URINARY TRACT INFECTION AMONG ANTENATAL MOTHERS

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### ABSTRACT

A descriptive study was conducted to assess the knowledge and practice on prevention of urinary tract infection among antenatal mother. Descriptive design was used as research design. Purposive sampling technique was adopted and selected 500 antenatal mothers. The tool used for data collection consisted of socio-personal proforma, obstetrical data, semi structured questionnaire and self-reported practice checklist. Result showed that more than half 69.6% of subjects had good knowledge, and only 2.6% of subjects had poor knowledge. According to practice results showed that majority of subjects 96.2% had average practice and only 3.8% of subjects had poor practice. There is highly significant association between knowledge on prevention of urinary tract infection with age and source of information at  $p < 0.001$  as well as the practice on prevention of urinary tract infection with education and source of information at  $p < 0.001$  which is determined by Kruskal Walli's test. There was a weak positive correlation ( $r = +0.745$ ) between knowledge and practice on prevention of urinary tract infection, significant at  $p < 0.001$  which determined by Spearman's Rank correlation co-efficient.

**KEYWORDS** : practice; prevention of urinary tract infection; antenatal mothers.

### INTRODUCTION

Pregnancy is a creative and productive period in the life of a woman. It is one of the vital events, which needs special care from conception to postnatal period. Every mother wants to enjoy the nine months period with the fetus inside her; the joyful experience of the pregnancy is not always joyful. Sometimes it is associated with problems of varying severity. Minor disorders are one among those problems, which causes discomfort to the mothers during pregnancy. One of the very common and niggling health conditions that affect many women in their reproductive years is urinary tract infection or UTI. This is a bacterial infection of the urinary tract, which includes the urethra, but can also affect the bladder and kidneys.

While the infection as such is not serious, it can be so in pregnant women. There is an increased risk of kidney infection, pyelonephritis in pregnant women with UTI. This is a far serious condition, and if neglected or untreated, can even lead to kidney failure. The incidence of infection of the kidney increases in the 3rd trimester of pregnancy. Catheterization often done during childbirth can trigger off an infection. An infection during pregnancy may result in complications such as premature birth, low birth weight or even death of the foetus. Therefore, a regular urine test is recommended during pregnancy to eliminate the risk of urinary infection.

The most common cause of UTI is a bacterium called Escherichia coli or e.coli, which resides in the colon. For females urethra is short and close to the anus, the chances of the bacteria travelling there and deeper inwards are very high. The bacteria multiply in the urinary tract and if neglected can give rise to bladder infection, which is called cystitis. There are other causative bacteria, Chlamydia and Mycoplasma, which is transmitted through sexual intercourse and travels from the vagina to urethra. In this case, both partners have to be medically treated to prevent recurrence.

Schieve and associates conducted a study involving 25,746 pregnant women and found that the presence of UTI was associated with premature labor (labor onset before 37 weeks of gestation), hypertensive disorders of pregnancy (such as pregnancy-induced hypertension and preeclampsia), anemia (hematocrit level less than thirty percent) and amnionitis. While this does not prove a cause and effect relationship, randomized trials have demonstrated that antibiotic treatment decreases the incidence of preterm birth and low-birth-weight infants. A risk of urosepsis and chronic pyelonephritis was also found. In addition, acute pyelonephritis has been associated with anemia.

### MATERIALS AND METHODS

In this study the investigator had used purposive sampling technique to select the subjects. Around six hundred pregnant women attended antenatal OPD during the period of data collection. Among those 500 antenatal mothers, who met the inclusion criteria were selected for the study. There was no attrition of subjects during the study. In this study the instruments used were: Socio-personal proforma -to assess the socio-personal variables of the subjects included age, education, occupation, religion, income, type of family, source of information and residence. Obstetrics data included gestational age, gravida, living children, abortion, initial visit, attended child birth preparation classes, type of previous delivery, past history of urinary tract infection, use of contraceptive methods and previous history of urinary catheterization. Tool-2; Structured questionnaire- to assess the knowledge on prevention of urinary tract infection among antenatal mothers. Tool-3; Self-reported practice checklist- to assess the practice on prevention of urinary tract infection among antenatal mothers. Administrative permission was obtained from institutional authorities. Data were collected over a period of one month from 4/01/2017 to 4/02/2017. After obtaining informed written consent from participants a structured questionnaire was administered to assess the knowledge on prevention of urinary tract infection and self-reported practice checklist to assess the practice on prevention of urinary tract infection among five hundred antenatal mothers.

### RESULTS

In this study majority (50.6%) of the subject were belongs to the age group of 18-24yrs, 35.8% of the subjects were belongs to age group of 25-29yrs, 11.4% of the subjects were belongs to the age group of 30-35yrs and 2.2% of the subjects were belongs to age group of 36-40yrs. Among subjects, 39% were belongs to both higher secondary, and under graduate, 10% of the subjects were belongs to high school, 9% of the subjects were belongs to post graduate and only 3% of the subjects were belongs to below 8th standards. More than half (82%) of the subjects were house wife. Majority (69.8%) of the subject were belongs to Hindus, 25.2% of the subjects were belongs to Muslims and only 5% of the subjects were belongs to Christians. According to income, majority (60%) of the subjects were had below 5000rs, 26.4% of the subjects were had 5000-10000rs, 7.2% of the subjects were had 10000-15000rs and only 6.4% of the subjects were had above 15000rs. Majority (55.8%) of the subject were belongs to nuclear family, More than half (57.2%) of the subjects had source of information from health care professionals, 25.6% of the subject had source of information from

their relatives, 9.2% of the subject had source of information from mass media and only 8.0% of the subject had source of information from their friends. Majority (91.8%) of the subjects were belongs to rural area of residence and Majority (49.8%) of the subjects belongs to 25th- 40th weeks of gestational age, 32.8% of the subjects were 13th – 24th weeks of gestation and 17.4% of the subjects belongs to 1st – 12th weeks of gestational age. Majority (49.4%) of the subjects were primi gravida. Majority (86.4%) of the subjects had no abortion, 10.6% of the subjects had one abortion, 2.8% of the subjects had two abortion and only 0.2% of the subjects had abortion thrice and above. More than half (59%) of the subjects came at 1st month for initial visit, 28% of the subjects came at 2nd month for initial visit, 6.6% of the subjects came at 3rd month for initial visit and only 6.4% of the subjects came at 4th month for initial visit. Majority (82%) of subjects have not attended child birth preparation classes and More than half (52%) of subjects were primi mother. Majority (67%) of the subjects had no previous history of urinary tract infection and More than half (84.4%) of the subjects not used contraceptives. Majority (79%) of the subjects of subjects had no previous history of urinary catheterization.

**Knowledge on prevention of urinary tract infection among antenatal mothers**

(n=500)

Knowledge	Frequency (f)	Percentage (%)
Poor	13	2.6
Average	139	27.8
Good	348	69.6
Total	500	100.0

Table 1 show that majority (69.6%) of the subject had good knowledge, 27.8% had average knowledge and only 2.6% of the subjects had poor knowledge on prevention of urinary tract infection among antenatal mothers.

**Practice on prevention of urinary tract infection among antenatal mothers.**

**Table 2: Distribution of subjects according to practice level of prevention of urinary tract infection**

(n=500)

Practice	Frequency (f)	Percentage (%)
Poor	19	3.8
Average	481	96.2
Total	500	100

Association between knowledge on prevention of urinary tract infection and selected socio personal variables.

There was significantly association with age, source of information at (p<0.001), education, occupation, religion at (p<0.01) and initial visit at (p<0.05).

Association between practices on prevention of urinary tract infection with selected socio personal variables.

There was significantly association with education, source of information at (p<0.01) and occupation, income, gravida, use of contraceptives at (p<0.05).

**DISCUSSION**

In the present study majority (69.6%) of the subjects had good knowledge, 27.8% of the subjects had average knowledge and only 2.6% of the subjects had poor knowledge on prevention of urinary tract infection among antenatal mothers.

The present study findings are consistent with the result of a

previous study which was assessed the knowledge of urinary tract infection among antenatal mothers in selected hospitals of Udupi District, Karnataka. Sixty antenatal mothers were selected during second trimester. The result showed that 46.67% had good knowledge and 53.33% had average knowledge on UTI.

In the present study reveals that majority (96.2%) of the subjects, had average practice, and only 3.8% of the subjects had poor practice on prevention of urinary tract infection among antenatal mothers.

The present study shows that there was a weak positive correlation between knowledge and practice on prevention of urinary tract infection among antenatal mothers which is significant at p<0.01. The findings of this study were consistent with the previous descriptive study to assess the knowledge and practice regarding urinary tract infection during pregnancy among 80 antenatal mothers at Sreeramapuram antenatal clinic in Bangalore city. The study shows that a more than half of respondents (57.5%) knowledge level was inadequate. The relationship between knowledge and practice were found to be positive and significant (r=+0.745). The result establishes the fact that the higher the knowledge, better the practice of the respondent in prevention of UTI (P>0.05).

**REFERENCES:**

- Davidson R. Michele, London L. Maricia, Patricia Ladwig. *OLDS Maternal Newborn Nursing and Women's Health Across the lifespan*. New Jersey; Pearson Prentice Hall, 2008; 394. Available from: <http://www.indiaparenting.com/whealth/data/wh1302>
- Masinde, B. Gumodoka, A. Kilonzo, E. Mshana, Prevalence of urinary tract infection among pregnant women. *Tanzan J Health Res*. 2009; 11(3), 157. Available from: <http://www.ncbi.nlm.nih.gov/pubmed>
- Park. K. *Test book of preventive and social Medicine*. 17th ed. Jabalpur: Banarsidasbhanot publishers. 2003. p. 359-364.
- Schnarr J, Smaill F. Asymptomatic bacteriuria and symptomatic urinary tract infections in pregnancy. *Eur J Clin Invest*. 2008 [cited 2008 Oct]; 38(2):50 [about 7 pages]. Available from: <http://doi.org/10.1111/j>
- Mc Laughlin. P Sean, Carson C. Culley. *Urinary Tract Infections in Women*. The medical clinics of North America. 2004; (88): 417
- Kamini Rao, Chandan Kashyap. *Text book of Midwifery and Obstetrics for Nurses*. Elsevier publication. 1st ed. 2011; p.
- Brasil. Ministerio da Saude. Programa de Humanizacao do Pre-Natal e Nascimento. *Informações para gestores e técnicos*. Brasília, 2007. Available from: <https://pt.slideshare.net/Marcusrenato/caderno-humanizassus>
- Christopher Haslett, Edwin R. Chilvers, Nicholas, A Boon nicki R college. *Principal of medicine and practice of medicine*. 19th ed. Churchill living stone publishers. p.147-159.
- Sirjana Adhikari1, Rojana Dhakal. Knowledge on Urinary Tract Infection among Primigravida Women. *International Journal of Health Sciences and Research*. 2015 [cited 2015 Oct]; 5(10):200+[about 4 pages]. Available from: <http://www.ijhsr.org>
- Little P, Everitt H, Williamson I, Moore M, Warner G, Gould C. An observational study of patient-centredness in primary care, and its relationship to outcome. *BMJ*. 2001;(323):p.908-11. Available from: <http://www.bmj.com/content/323/7318/908/article>