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## A descriptive study to assess the knowledge regarding prevention of urinary tract infection among antenatal mothers

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### Abstract

The present study aims to assess knowledge on urinary tract infection among the antenatal mothers. The method and materials: A descriptive research design was used for the present study. A total 50 samples were collected using non probability purposive sampling technique. A semi structured questionnaire was used to assess the demographic status and knowledge on prevention of urinary tract infection among antenatal mother, followed by that data was gathered and analyzed. The results the study revealed that there is a significant association between the selected demographic variables and level of knowledge at the level of  $p < 0.01$  conclusion: Thus, the present despite that maximum of the antenatal mother had moderate knowledge on prevention of urinary tract infection.

**Keywords:** urinary tract infection, antenatal mothers, knowledge

### Introduction

Health of inhabitant is wobbling day by day. Health furnishes life. Any commute may attribute to affiliation. Urinary tract infection is a one of the major cause of morbidity and it also co morbidities with other condition<sup>[1]</sup>. Urinary tract infection was first encovered in Egypt and still it is common bacterial infection without any fluctuation. the prevalence of urinary tract infection is J shaped distribution, higher in young children and also increases with age<sup>[2]</sup>. The major cause for urinary tract infection, is subsequent colonization of virulent organism in the access of urinary bladder and women under antibiotic treatment are more susceptible for urinary tract infection<sup>[3]</sup>. Cystitis and pyelonephritis are the systemic infection of urinary tract infection in upper part of urinary system<sup>[4]</sup>. The urinary tract infection, collaboration with dysuria and irritative voiding. Studies say frequent sexual intercourse is the major predictor for recurrent urinary tract infection<sup>[5]</sup>. The infection is common in both gender, only the female is more vulnerable, due to their anatomy representation and reproductive physiology.<sup>[6]</sup> the total prevalence rate of urinary tract infection among the women (18-40) is 27.3%, were more frequency found in pregnant women<sup>[7]</sup>. Urinary tract includes, bladder, kidney, ureter and urethra . Adolescent are extremely enthusiastic, this intern results with lack of knowledge and information<sup>[8]</sup>.

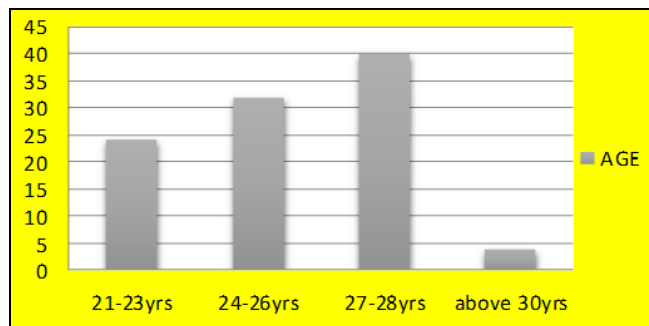
### Material and Methods

After obtaining and ethical clearance from the institutional ethical committee of saveetha institute of medical and technical science and formal permission letter obtained from the in charge of OBG OP, present study was conducted. For the present study quantitative approach with descriptive research design was adopted. The data were collected using a non-probability purposive sampling technique from 50 antenatal mothers. The inclusion criteria for the study, participants, who are available during the study period and who are cooperative and who understand both Tamil and English. Exclusion criteria for the study are, samples who are all not willing to participate in the study. The purpose of the study was explained by the investigator to each of the study participants and a written informed consent was obtained from them. The demographic and knowledge on prevention of urinary tract infection, data was collected from the samples using semi structured questionnaire. The data were analyzed by descriptive and inferential statistics. The sample characteristics were described using frequency and percentage. Chi- square was used to associate the level of knowledge with selected demographic variables.

**Results and Discussion**

**Section 1: Description of the demographic variables of the antenatal mothers**

Out of 50 antenatal mothers, 12 (24%) were in the age group of 21-23years, 16 (32%) were in the age group 24-26 years, 20 (40%) were in the age group 27-28 years and remaining 2 (4%) were above 30 years. While assessing the religious status, about 23 (46%) were Hindu, 14(28%) were Muslims and rest of 12 (24%) are Christians . educational status of the study states that, about 27 (54%) were under formal education, 17 (34%) were of primary schooling, 4(8%) of higher education and remaining 2(4%) were of degree holder. collected data also implies about occupation, In which 18% (36%) were housewife, 21 (42%) were government employee, 11 (22%) were of private employees. Income of the family states that maximum of the 14(28%) were gaining below 3000 per month, 16 (32%) were gaining under 3001-4000 per month, 12 (24%) were earning 4001-5000 and remaining 8(16%) were earning above 5000 per month. the collected data also states that maximum 23(46%) were of nuclear family and 27 (52%) were of joint family .the dietary pattern of the study population manipulates that, 12(24%) were vegetarian and 37 (74%) were non vegetarian. Place of residence states data, shows that maximum of them, 42 (84%) were of urbanized area and remaining 8 (16%) were of rural location .about 32(64%) of them had previous history of UIT infection and 18(36%) of them had no significant history. family history of UTI states that about, 49(98%) had parental side, 11 (22%) had maternal side, 27 (54%) had sibling and rest 8(16%) had no history. Maximum of the population had information, 32 (64%) from magazines, 12 (24%) had through television and remaining 6 (12%) are lacking with sources of information.



**Fig 1: Age**

**Frequency and percentage distribution of age**

The present study is supported by Leena anjelin 2016 study on prevention of UTI. This was the descriptive study that coincides with the results of present study. The results of 100 samples shows that, out of 100 samples, (59 per cent) were in the age group 23 to 26 yrs, (25 per cent) were in the age group up to 22 yrs and (16 per cent) belongs to the age group of 27 & above. In terms of age at marriage, (43 per cent) belongs to 22 to 23 yrs, (32 per cent) belongs to 25 yrs & above and (25per cent) belongs to up to 21 yrs with regards to education,(48 per cent) had completed under graduates, (36 per cent) & (16 per cent) had completed their P.G & U.G respectively. Regarding type of family, (69 per cent) belongs to (30 per cent) joint family category and (31 per cent) belongs to the category of nuclear family. In terms of gestational age, (53 per cent) were in the 29 to 42 weeks, (37 per cent) belongs to 13 to 28 weeks and category (10 per

cent) was in the category of up to 12 weeks [9].

**Section 2: Assessment of level of knowledge on prevention of urinary tract infection among antenatal mothers**

**Table 1:** Assessment of level of knowledge on prevention of urinary tract infection among antenatal mothers

Level of Knowledge	No.	%
Inadequate (<50%)	9	18%
Moderate (51-75%)	38	76%
Adequate (>75%)	3	9%

Table shows that 38(76%) had moderate knowledge, 3(9%) had adequate knowledge and 9(18%) had inadequate knowledge on prevention of UIT among antenatal mothers. The present study is supported by Gondwe Hazwell1 & Alfred Matafwali Sichilima (2020) conducted a study to assess level of knowledge and attitude regarding Urinary Tract Infections and its prevention among mothers attending antenatal sessions. The study was conducted on 120 mothers attending antenatal sessions at the clinic by purposive sampling technique. The structured questionnaire was used to collect data. The study revealed that 21 (17.6%) antenatal mothers had good knowledge, whilst 74 (62.2%) and 24 (20.2%) had average and poor knowledge respectively (Mean score = 3.16 points, SD = 2.74). Health center/clinic was cited as the main source of information regarding UTIs by 30.4% of the antenatal mothers. Regarding attitude, 13 (10.9%) had positive attitude, 59 (49.6%) had neutral attitude and 47 (39.5%) shown negative attitude (Mean score = 5.67 points, SD = 2.49). On the whole, respondents did recognize the threat posed by UTIs as most (70.6%) agreed with the statement: “I think that UTIs are serious and life threatening infection during pregnancy.” There was a statistically significant association between educational level, socioeconomic status and knowledge regarding UTIs and its prevention (P= 0.001 & P=0.011), as well as between knowledge and attitude (P=0.006). This study concluded that knowledge enhancement program related to UTIs among mothers attending antenatal sessions in health centers/clinics or hospitals may change their level of knowledge and attitude.[10]

**Section 3: Association of level of knowledge on prevention of urinary tract infection with selected demographic variables of antenatal mothers.**

The table despite that demographic variables such as income of the antenatal mothers and family history of UTI has significant association with level of knowledge on prevention of UTI at level of p<0.05. The present study is supported by Terje *et al.* (2004), conducted a study on prevalence of UTI among adolescent female. The study sample size is 211 adolescent girls aged between 13 to 21 years. The result revealed that 120 sample (57%) had UTI. In which 107 (69%) had culture conformed UTI, remaining 13 were under diagnosed. This 13 people had a co-infection with STIs and UTI. The researcher concluded that adolescent girls presenting with urinary symptoms should be tested for STIs and UTI to ensure timely diagnosis and treatment [11]. The present study is supported by Faheya T, Webb E (2003) conducted a prospective survey on incidence of urinary tract infection and causative organism. A total of 11,308 urine sample were collected from the

patients and analyzed for UTI. The results revealed that there was the incidence of 1,020 of UTI out of 11,308 urine sample. A causative organism identified from collected urine sample was *E. coli* with 620 cases, *Klebsiella pneumoniae* with 115 cases, *staphylococcus aureus* with 175 cases, *Cocci Enterococcus* with 110 cases. Out of 1,020 patients 227 were male and 793 were female. The study concluded that as females are highly exposed to UTI than males. So the action towards prevention can be focused on female population<sup>[12]</sup>.

### Conclusion

UTI in pregnancy is associated with significant morbidity for both mother and baby. All pregnant mothers should be screened for UTI. The Knowledge of Early treatment with personal hygiene, good hydration has significantly reduced the above complications.

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### Conflict of Interest

Author's declare no conflict of interest.

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