

Urinary Tract Infection during Pregnancy among Antenatal Mother

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Abstract

Urinary tract infections (UTI) are one of the most common medical complications of pregnancy. Increased incidence of UTI during pregnancy is due to the morphological and the physiological changes that take place in the genitourinary tract during pregnancy. Urinary tract infections are bacterial infection with a global annual incidence of approximately 150 million cases reported. In about 40% of women and 12% of men experience at least one symptomatic urinary tract infection during their life time and as many as 40% of affected in women show recurrent urinary tract infection. The prevalence of urinary tract infection in pregnancy women in India is reported to range from 31% to 24% reported. Studies have shown that urinary tract infection in pregnancy may result in maternal and foetal morbidity. The pregnant woman should be educated, about the physiological changes during pregnancy which may be one of the risk factors for development of urinary tract infection and also its prevention. Regular antenatal care should be taken to minimize the complications of pregnancy, and to ensure a healthy maternal and foetal outcome. To assess the knowledge regarding urinary tract infection during pregnancy and also finds the association of knowledge among antenatal mothers with selected demographic variables.

Key words: Urinary Tract Infections • Pregnancy • Antenatal Mothers • Maternal • Foetal Morbidity

INTRODUCTION

Pregnancy, also known as gestation is the time during which one or more offspring develops inside a women Urinary tract infection is infection that hold bacteria colonize the area through which urine make of the body during pregnancy the chance of acquiring these infection is increased the baby with grows your uterus expand this put pressure on your bladder and ureters under pressure urinary tract gets blocked and cannot drain urine properly in this situation the bacteria readily grow and thrive causing an infection the infection can run from the urethra up through the bladder and into the kidney and the ureters [1-2].

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Urinary tract infections are bacterial infection with a global annual incidence of approximately 150 million cases. Pregnancy is biologically, physiologically, and psychologically stressful, even for healthy women. Among these urinary tract infection is the most common medical complication of pregnancy occurring in approximately 4-7% of pregnant women. Incidence of UTI during pregnancy in India is 8.8%. UTI will usually begin in at the 6th week and peaks during 22 to 24th week of gestation, 90% of the pregnant women develop ureteric dilation thereby increasing the risk of urinary stasis and vesicoureteric reflux in addition glycosuria aminoaciduria during pregnancy provide an excellent culture medium for bacteria in urinary stasis these changes along with already short urethra and difficulty with hygiene due to distended pregnant belly increase the frequency of urinary tract infection in pregnant women [5-7].

Urinary tract infection is associated with significant morbidity and healthcare expenditure in all age group [1-2]. urinary tract infection account about 10% of

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primary care consultation by pregnant women and it was reported that up to 15% of women will have one episode of urinary tract infection at some time during their life [1] the incidence of urinary tract infection reported among pregnant mother is about 8% [1-2]. anatomically urinary tract infection can be classified into lower urinary tract infection involving the bladder and urethra and upper urinary tract infection involving the kidney and pelvic ureter. The majority of the urinary tract infection occur due to ascending infection [1,2,8-9].

Urinary tract infection symptoms during pregnancy burning feeling when you urinating, cloudy urine, foul smell, fever, pain in the lower abdomen and lower back, painful sex during pregnancy urinary tract infection treated with antibiotics during pregnancy mainly antimicrobials under the categories of penicillin, amoxicillin, azithromycin, erythromycin they will recommend you taking these drug for a period lasting from 3 to 7 days even if the symptoms disappear you have to take the drug until the prescription is done lest the bacteria become resistant. Prevention of urinary tract infection drinking at least 8 glasses of water a day, always wiping from front to back whenever you go to the bathroom, urinating before and after sexual intercourse, wearing loose-fitting pants, wearing cotton underwear [10,11].

Studies have shown that urinary tract infection in pregnancy may result in maternal and foetal morbidity. The pregnant woman should be educated, about the physiological changes during pregnancy which may be one of the risk factors for development of urinary tract infection and also its prevention. Regular antenatal care should be taken to minimize the complications of pregnancy, and to ensure a healthy maternal and foetal outcome. To assess the knowledge regarding urinary tract infection during pregnancy and also finds the association of knowledge among antenatal mothers with selected demographic variables.

Materials and Methods

The present studies approach adapted to assess the knowledge among primigravida mother related to urinary tract infection during pregnancy it include research approach is chapter describes the methodology followed a study to assess the knowledge among primigravida mother related to urinary tract infection during pregnancy it includes description of research approach techniques, development and description of the tool, validity, reliability, ethical consideration, data collection procedure and data entry and analysis.

Sample Size

Sample size of this study comprised of 40 antenatal mothers who were visiting antenatal clinic in primary health centre, guduvachery and fulfil the inclusion criteria

Sampling Techniques

The sampling technique used was non probability convenient sampling techniques

Criteria for Sample Collection

Inclusion Criteria

- ✓ Antenatal mothers between the ages of 20-35 years.
- ✓ Who are in the first and second trimester of pregnancy?
- ✓ Antenatal mothers who were visit antenatal Check Up in primary health centre and who were willing to participate.
- ✓ Antenatal mothers above 20-40 weeks of gestations.

Exclusion Criteria

- ✓ Antenatal mothers who are not willing to participate in the study.
- ✓ Antenatal mothers who are not available at the time of study.
- ✓ Antenatal mothers who are already diagnosis with urinary tract infection.
- ✓ Antenatal mothers whose age less than 20.
- ✓ Antenatal mothers with high risk pregnancy.

Statistical Analysis

Frequency and percentage distribution were used to determine demographic variables and level of knowledge regarding urinary tract infection among antenatal mothers. Chi square test will be used to associate the level of knowledge regarding urinary tract infection among antenatal mothers.

Results and Discussion

UTIs are one of the most common medical complications of pregnancy. Increased incidence of UTI during pregnancy is due to the morphological and the physiological changes that take place in the genitourinary tract during pregnancy. UTIs are common during pregnancy. That's because the growing fetus can put pressure on the bladder and urinary tract. This traps bacteria or causes urine to leak. There are also physical changes to consider. Since UTI is frequently associated with complications, it is necessary to have an estimate of its burden in pregnant women. There were many studies estimating the magnitude of UTI in urban area as well as in tertiary care settings.

Table 1 describes the demographic information of antenatal mothers those who were participated in this study. Among the antenatal mothers higher proportion (62.5%) belongs to the age group of 21-25 years. Regarding their religion (87.5%) among them were Hindus. In the educational status higher proportion (70%) of them studied up to Graduate . In occupation higher proportion of antenatal mothers (85%) was homemakers. According to family income (52.5%) were earning above 10,000. According to area of living (55%) of antenatal mothers were from rural area. In accordance to type of family about (50%) of antenatal mothers were from Nuclear family and joint family. According to source of information (70%) of antenatal mothers got information from their family members (Figures 1 and 2)

Section B: Assessment of knowledge on urinary tract infection among antenatal mothers.

Table 2 describes the knowledge on antenatal mothers. On the basis of knowledge score (80%) had inadequate knowledge, (17.5 %) had adequate knowledge (2.5 %) (Figures 3 to 9).

With regard to age, majority of the antenatal mothers (62.5%) were in Age group between 21-25 years .With regard to Religion majority of the antenatal mothers (87.5%) were in Hindus. With regard to educational status majority of the antenatal mothers (70%) studied up to Graduate. With regard to occupation majority of the antenatal mothers (85%) were Home maker. With regard to family income majority of the antenatal mothers (52.5%) were earning rupees 10000. With regard to Area of living majority of antenatal mothers (55%) were residing in rural area.

With regard to Type of family majority of antenatal mothers (50%) were from nuclear family and joint family. With regard to source of information on urinary tract information majority of antenatal mothers (70%) got information from family members. The first objective was to assess the knowledge on urinary tract infection among antenatal mothers. In this study about antenatal mothers had 1-7 inadequate knowledge (7%) of antenatal mothers had 8 - 14 moderate knowledge (32%) of antenatal mothers had 15-21 adequate knowledge (1%). The second objective was to associate the knowledge on urinary tract infection among antenatal mothers with selected demographic variables.

Conclusion

This study was a study the level of UTI among antenatal mothers in primary health center, guduvachery. Extensive literature review and studies was done from primary and secondary sources that formed the basis of problem,

Table 1: Demographic information of antenatal mothers.

S.No	Demographic variables	frequency	Percentage	
1	Age	21-25 years	25	62.50%
		26-30 years	10	25%
		31-35 years	5	12.50%
2	Religion	Hindu	35	87.55%
		Christian	2	5%
		Muslim	3	7.50%
3	Education	Primary education	12	30%
		Graduate	28	70%
4	Occupation	House wife	34	85%
		Working mother	6	15%
5	Type of family	Nuclear family	20	50%
		Joint family	20	50%
6	Area of living	Rural	22	55%
		Urban	18	45%
7	Family income per month	5000	9	22.50%
		5000-10000	10	25%
		10000	21	52.50%
8	Source of information on urinary tract information	yes	12	30%
		no	28	70%

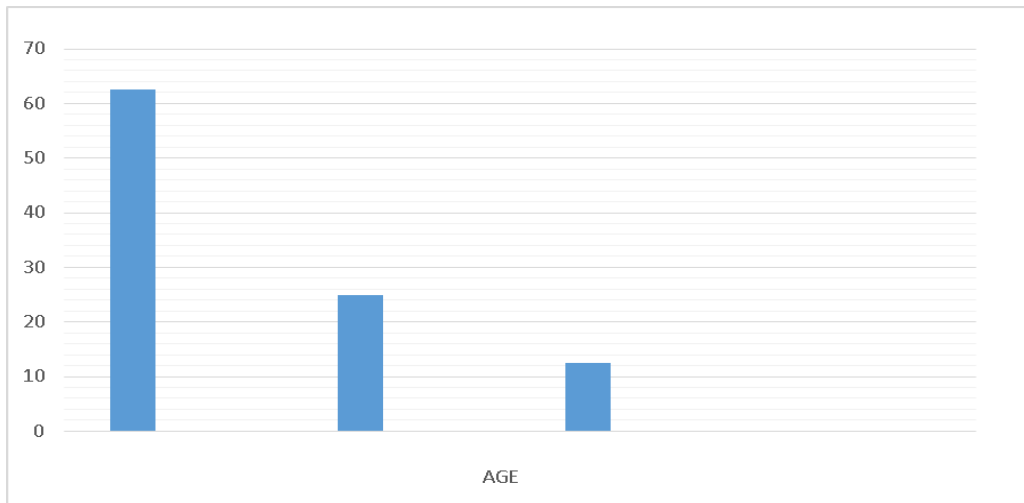


Figure 1. Age wise distribution of antenatal mothers.

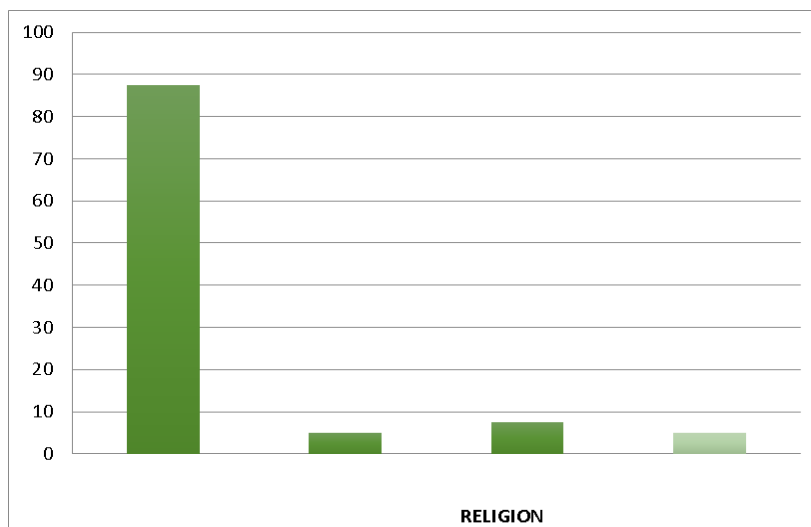


Figure 2. Religion wise distribution of antenatal mothers.

Table 2: Distribution of antenatal mothers according to the knowledge scores.

S.No	Knowledge (score)	Frequency (f)	Percentage (%)
1	Inadequate	7	17.50%
2	moderate	32	80%
3	adequate	1	2.50%

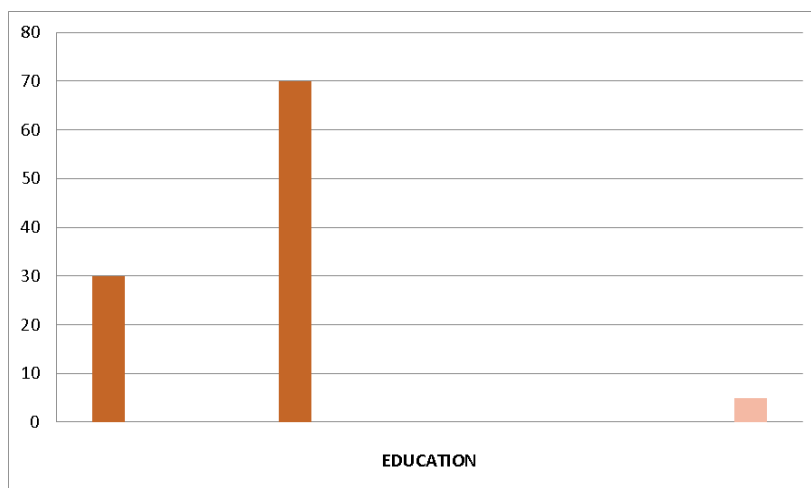


Figure 3. Education wise distribution of antenatal mothers.

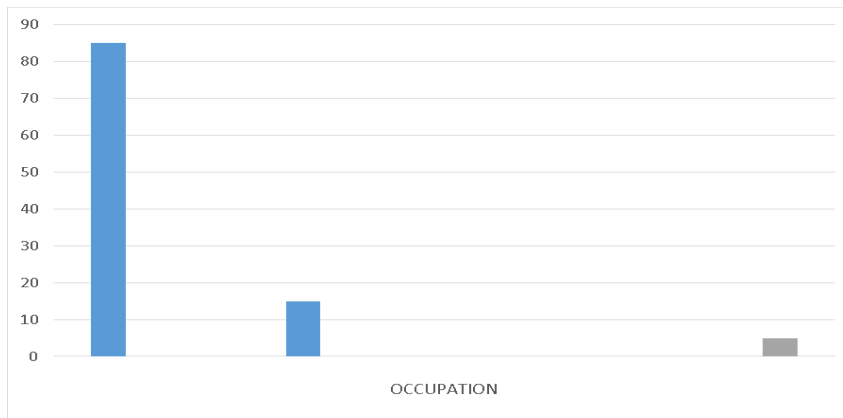


Figure 4. Occupation wise distribution of antenatal mothers.

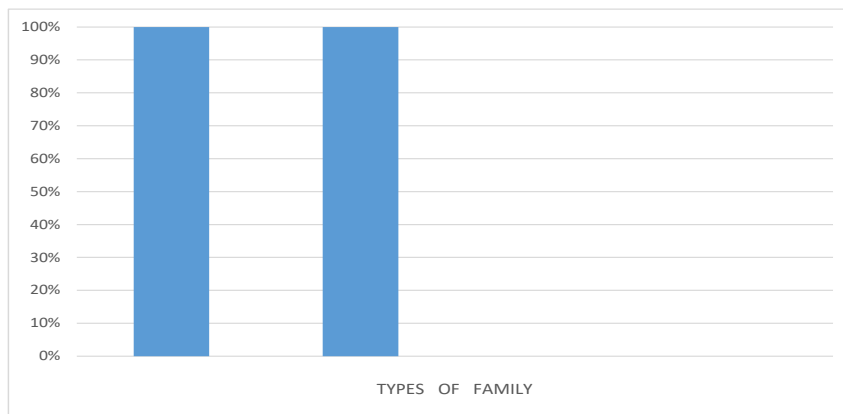


Figure 5. Types of family wise distribution of antenatal mothers.

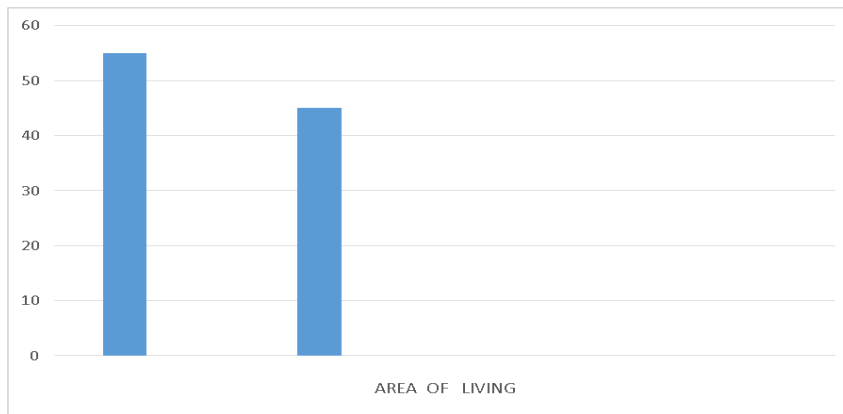


Figure 6. Area of living wise distribution of antenatal mothers.

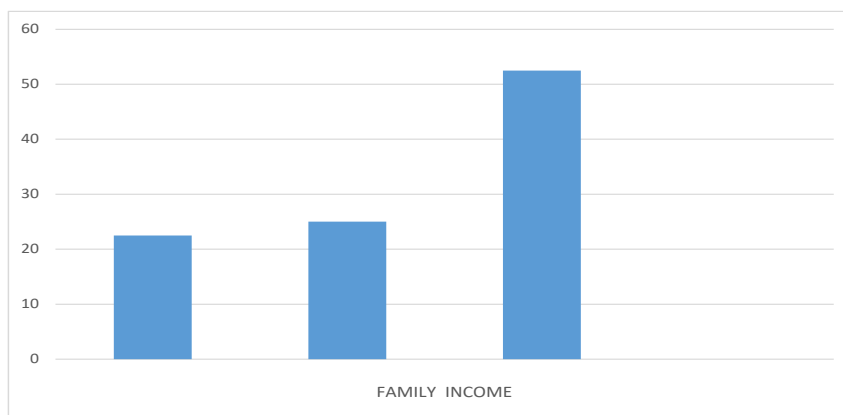


Figure 7. Family income wise distribution of antenatal mothers.

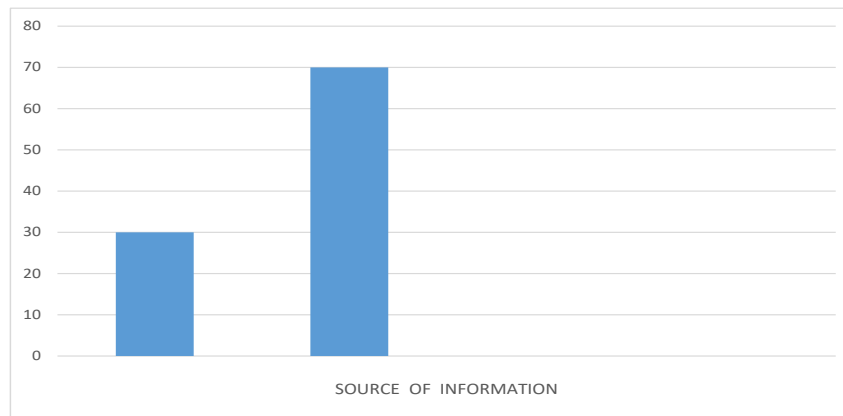


Figure 8. Source of information wise distribution on antenatal mothers.

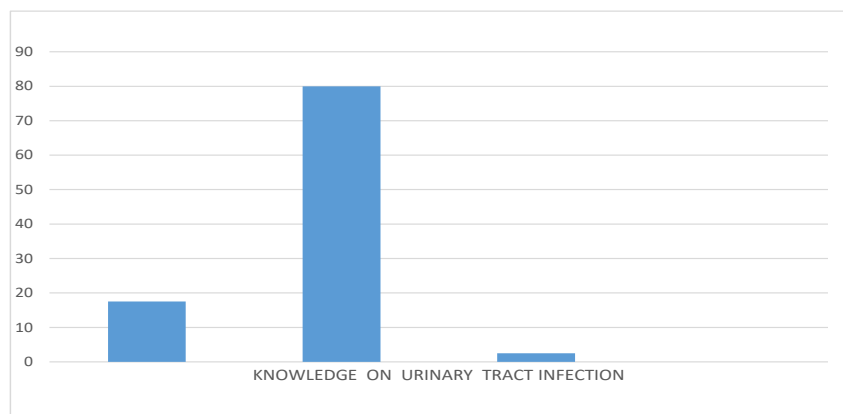


Figure 9. Distribution of antenatal mothers according to the knowledge score.

development of tool, drawing the conceptual frame work and the methodology, and thus provided evidence based guidance for the study. The researcher adopted the descriptive research design. Non probability convenient sampling technique was used to select 30 samples based on inclusion criteria. The tool consisted of the demographic profile.

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Ethical Approval

The study was approved by the Institutional Ethics Committee.

Conflict of Interest

The authors declare no conflict of interest.

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