



# A DESCRIPTIVE STUDY TO ASSESS THE KNOWLEDGE REGARDING PREVENTION OF URINARY TRACT INFECTION DURING PREGNANCY AMONG ANTENATAL MOTHERS IN A SELECTED HOSPITAL OF VRINDAVAN, UTTAR PRADESH

*MS. BLESSY MATHEW, ASSISTANT PROFESSOR SUBHARTI NURSING COLLEGE, MEERUT,  
UTTAR PRADESH*

## Abstract

Any infection during pregnancy can be extremely deleterious for pregnant women and baby. The Hormonal and mechanical changes which occur in pregnancy can promote urinary stasis and reflux. Accompanied by these changes, along with an short urethra (approximately 3-4 cm in females) and difficulty with maintaining hygiene due to a distended pregnant belly, contributes in making urinary tract infection the most common bacterial infections during pregnancy and also because the enlarged womb (uterus) compresses on the bladder and prevents it draining as well.

## Objectives of Study

- To assess the knowledge regarding prevention of urinary tract infections among antenatal mothers.
- To find the association between knowledge regarding prevention of urinary tract infection among antenatal mothers with heir selected socio-demographic variables.

## Materials and Methods

In this study descriptive research design is used to assess the level of knowledge regarding prevention of urinary tract infection among antenatal mothers. The approach of the study is quantitative research approach. The setting of the study is selected hospital in Ramakrishna Mission Sevashrama Vrindavan, Mathura. The target population for this study is antenatal mothers in admitted in hospital Antenatal mothers who fulfil the inclusion criteria will be considered as the sample. In this study sample size will be 40 mothers. A non-probability convenient sampling technique is used in this study.

## Results

Results revealed that majority of the Antenatal women (15%) had adequate knowledge, 22 (55%) had moderate knowledge and 12 (30%) had Inadequate knowledge.

**Conclusion:** The findings of the study revealed that educating the mothers would be effective in updating the knowledge regarding the prevention of urinary tract infection .

**Keywords:** Knowledge, urinary tract infection ,Antenatal mothers

## Introduction

Any infection during pregnancy can be extremely deleterious for pregnant women and baby. The Hormonal and mechanical changes which occur in pregnancy can promote urinary stasis and reflux. Accompanied by these changes, along with an short urethra (approximately 3-4 cm in females) and difficulty with maintaining hygiene due to a distended pregnant belly, contributes in making urinary tract infection the most common bacterial infections during pregnancy and also because the enlarged womb (uterus) presses on the bladder and prevents it draining as well.

If urine does not drain quickly from the bladder, germs are more able to multiply and cause an infection. Untreated bacteriuria during pregnancy is associated with risks to both the fetus and the mother, including pyelonephritis, preterm birth, low birth weight, and increased perinatal mortality. Pregnant patients are considered immunocompromised UTI hosts because of the physiologic changes associated with pregnancy. Common symptoms of a urinary tract infection are pain in passing urine, passing urine more often (urinary frequency), pain in the lower stomach area (abdomen), blood in your urine (haematuria), urine that looks cloudy or smells more than normal. Urinary tract infection will usually begin in at the 6th week and peaks during 22 to 24th week. Asymptomatic bacteria occur in 4% to 8% of all pregnancies.

## Need of study

Urinary tract infection is more commonly seen in primigravida than multiparous. Ignorance about the potential of this health hazard also constitutes a barrier that prevents the initiation of preventive and remedial measures at appropriate time. Comparing to the urban population most of the pregnant women belonging to rural area are still not aware about this. Previous history of urinary tract infection increases the chance of recurrent infection by 50%, presence of asymptomatic bacteria increases the chance by 25% and abnormality in the renal tract is found about 25%. About 2- 10 % of young women are susceptible to asymptomatic in pregnancy on routine screening. If not detected early and treated promptly, this infection complicates 1-3% of all pregnancies. Keeping this view in mind researcher initiated herself in the study.

## Objectives of Study

- a) To assess the knowledge regarding prevention of urinary tract infections among antenatal mothers.
- b) To find the association between knowledge regarding prevention of urinary tract infection among antenatal mothers with heir selected socio-demographic variables.

### Operational Definition

- a) **Assess:** In this study it refers to, measures the knowledge of the antenatal mothers regarding urinary tract infection during pregnancy.
- b) **Knowledge:** In this study it refers to, the correct response from the antenatal mothers regarding urinary tract infection during pregnancy as elicited through self-administered questionnaire
- c) **Urinary tract infection:** in this study it refers to, infection caused by pathogenic micro- organism in the urinary tract and its prevention
- d) **Antenatal mothers:** In this study antenatal mother refers to the women those who are primigravida and multiparas in 1st trimester who comes for the antenatal check-ups in Vrindavan, Mathura.

### Materials and Methods

In this study descriptive research design is used to assess the level of knowledge regarding prevention of urinary tract infection among antenatal mothers. The approach of the study is quantitative research approach. The setting of the study is selected hospital in Ramakrishna Mission Sevashrama Vrindavan, Mathura. The target population for this study is antenatal mothers in admitted in hospital .Antenatal mothers who fulfil the inclusion criteria will be considered as the sample. In this study sample size will be 40 mothers. A non-probability convenient sampling technique used in this study.

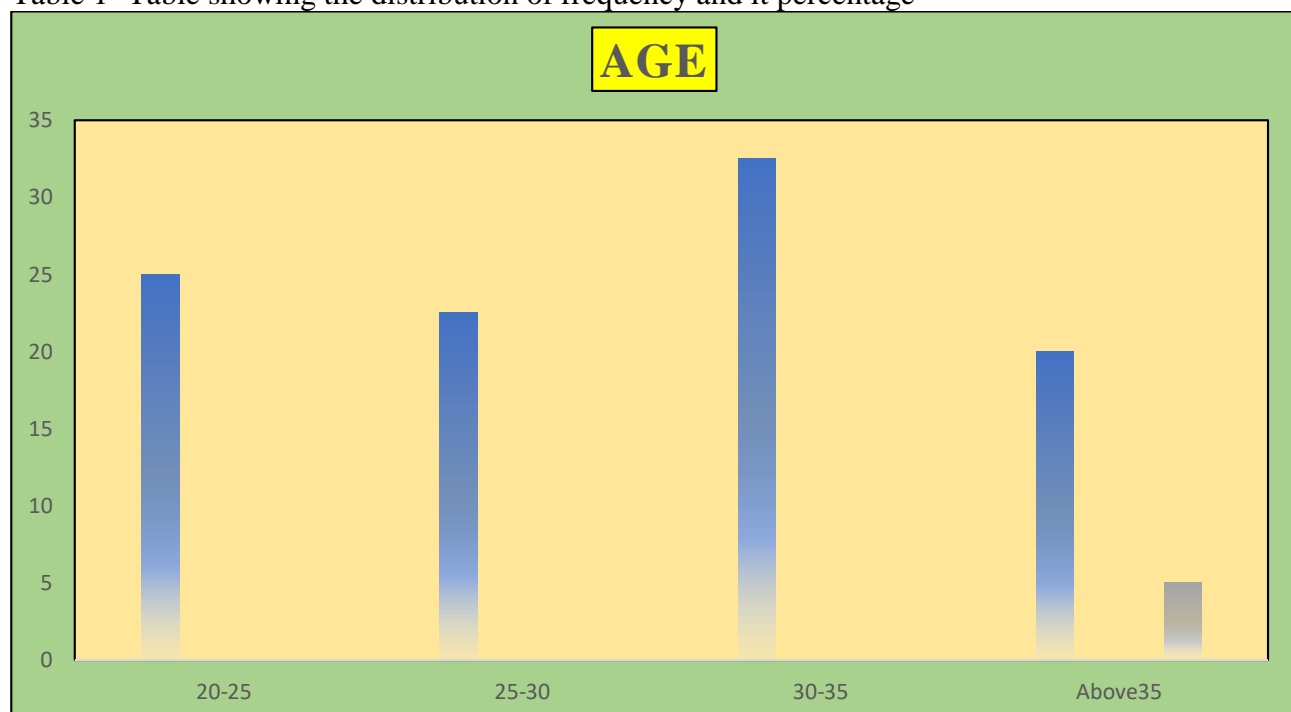
The tool used in the study consists of two parts:

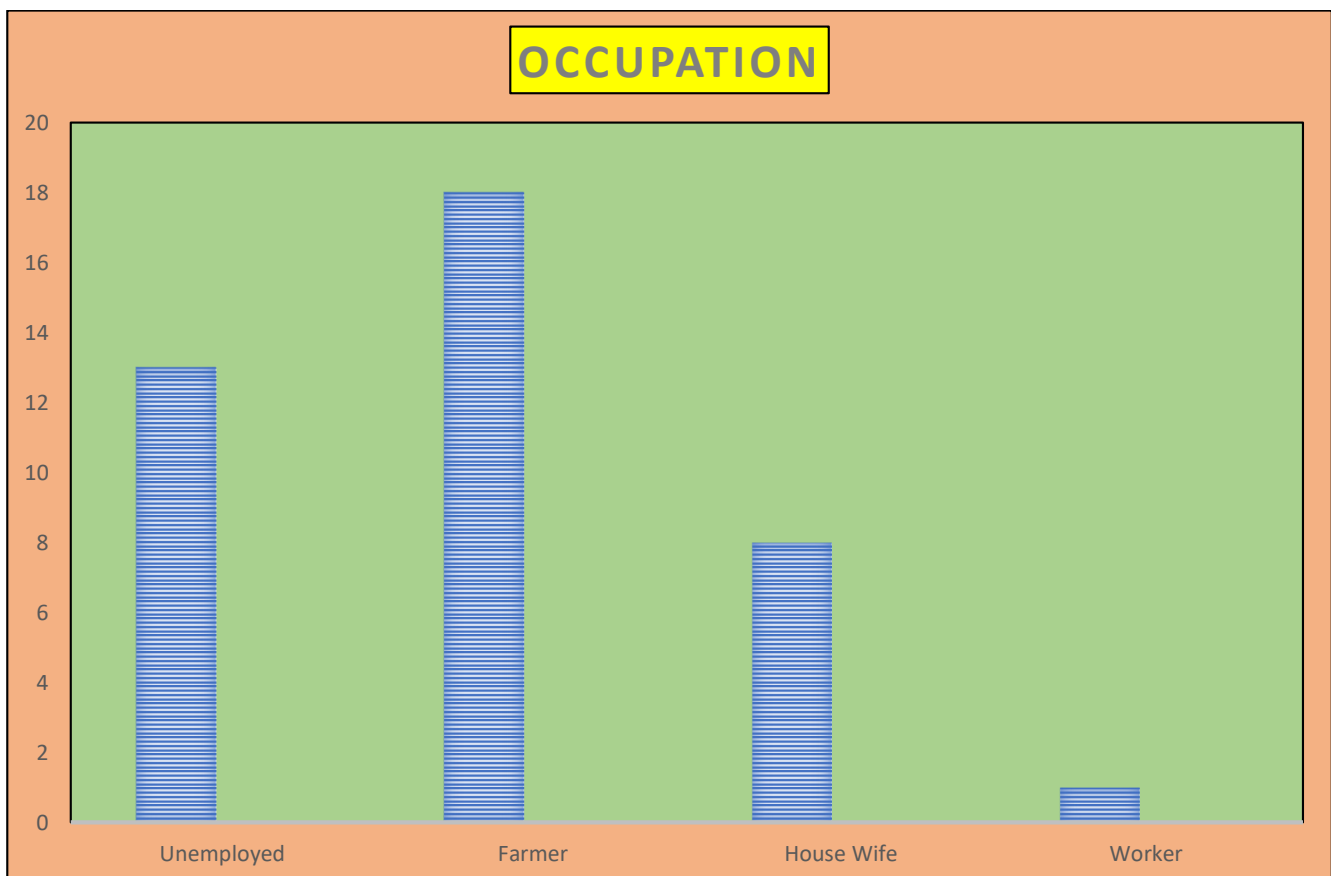
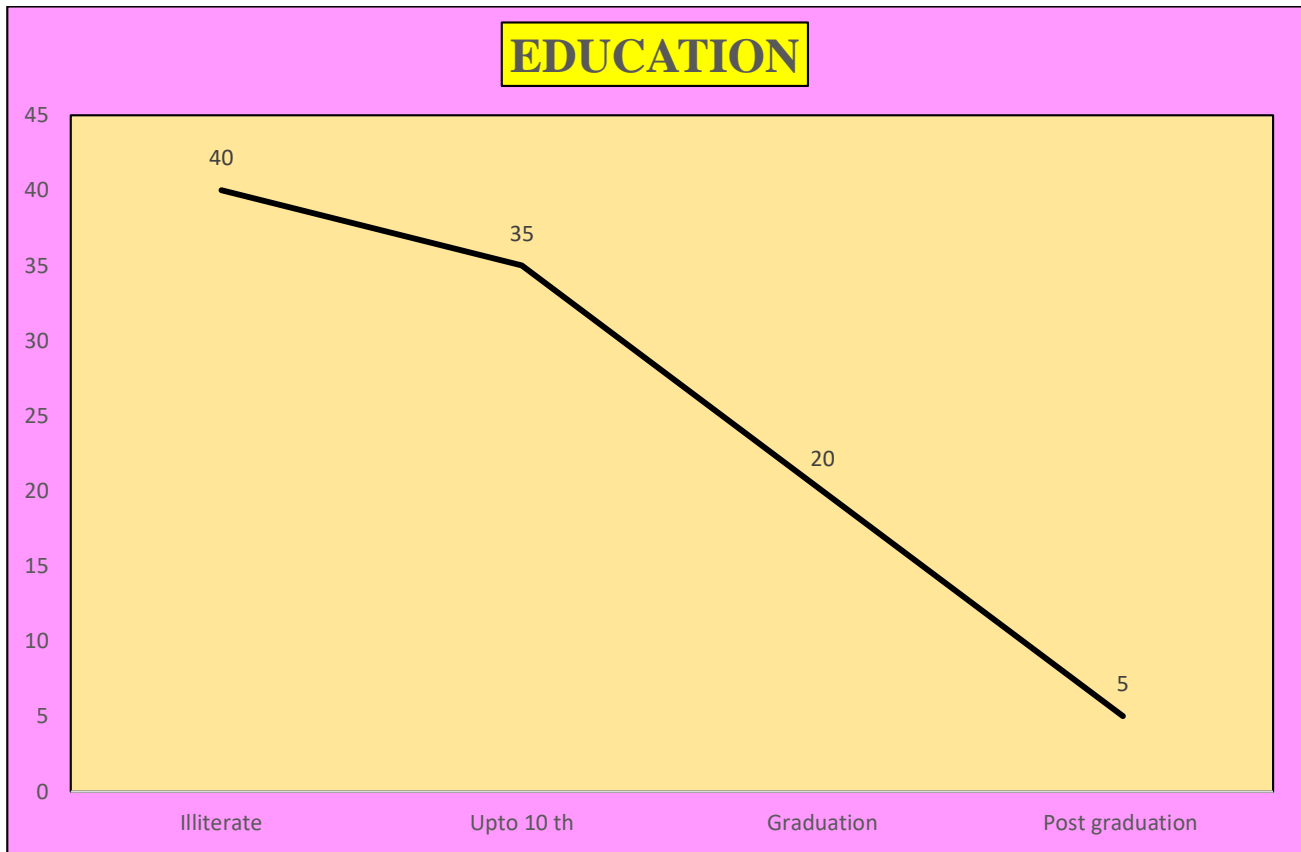
**Section- I:** Information on demographic variables of the respondents containing 5 items. **Section- II:** Structured knowledge questionnaire of 30 items related to knowledge regarding prevention of UTI among antenatal mothers. For the 30 items, each correct answer was awarded with a score of '1' and score of '0' was awarded for the wrong answer. The data obtained was analysed in terms of descriptive and inferential statistics.

**Section III:** Data describing association between knowledge scores and selected demographic variables among final year GNM students

DEMOGRAPHIC VARIABLES	FREQUENCY	PERCENTAGE
<b>Age</b>		
20-25	10	25%
25-30	09	22.5%
30-35	13	32.5%
Above 35	08	20%
<b>Education</b>		
Illiterate	16	40%
Up to 10 <sup>th</sup>	14	35%
Graduation	08	20%
Post-graduation	02	05%
<b>Occupation</b>		
Unemployed	13	32.5%
Farmer	18	45%
House wife	08	20%
Worker	01	2.5%
<b>Married life</b>		
1-5	18	45%
6-10	12	30%
11-16	09	22.5%
Above 16	01	2.5%
<b>Gravida</b>		
Primigravida	19	47.5%
Multigravida	21	52.5%

Table 1- Table showing the distribution of frequency and it percentage





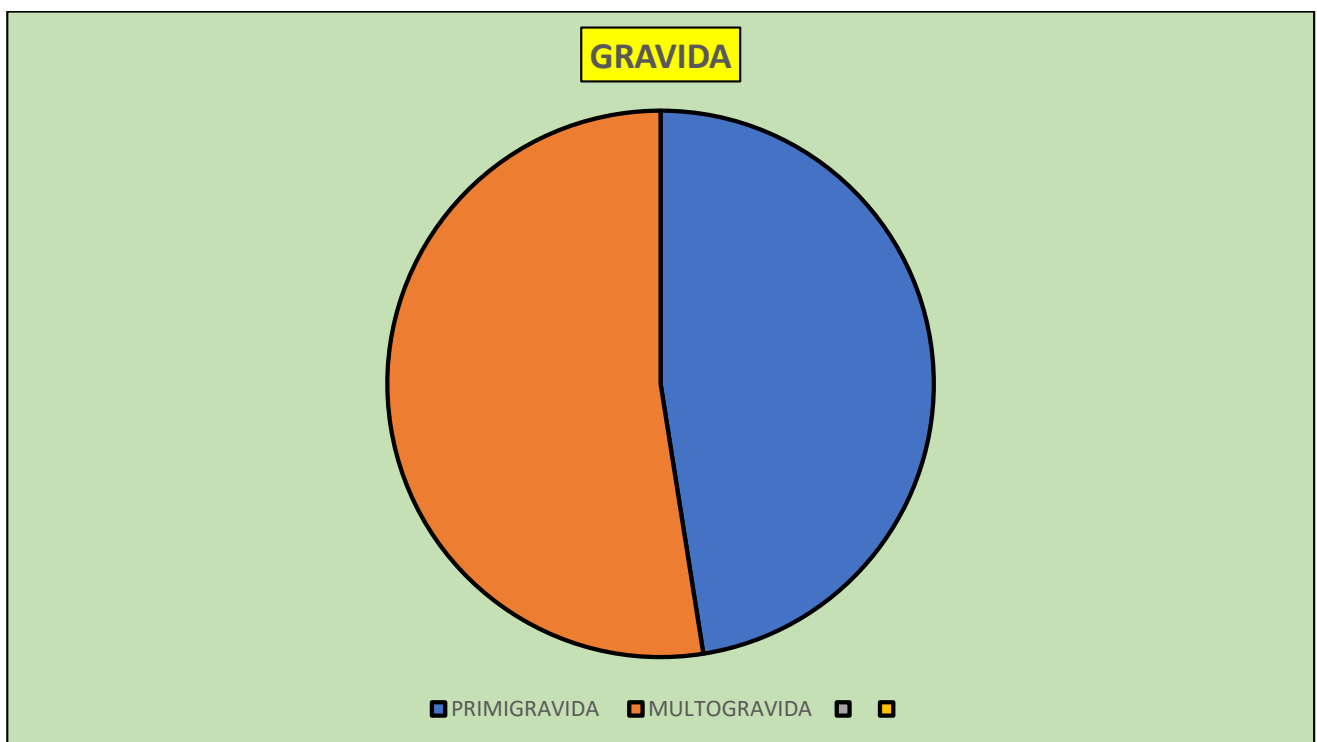
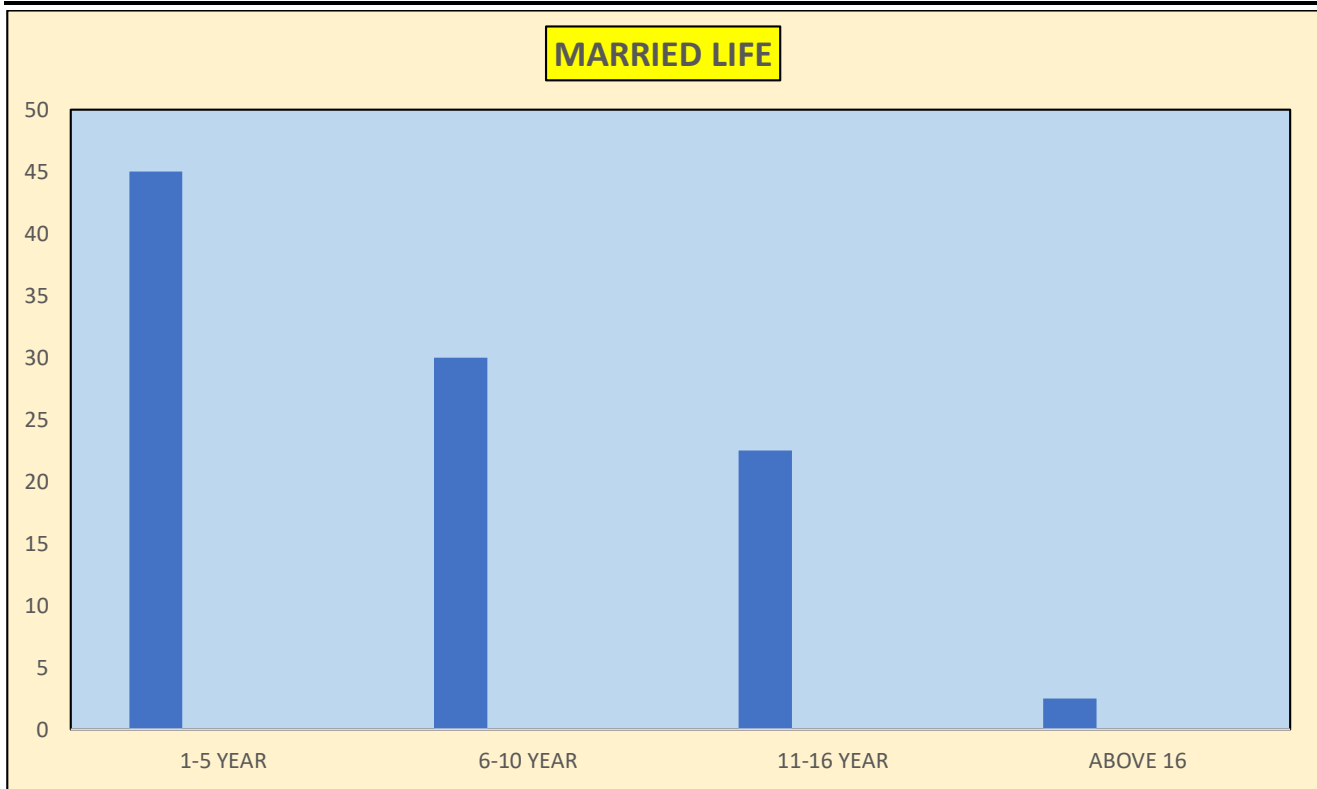


Fig1- Graph representing the demographic variables

Demographic Variables	Percentage Of Obtained Knowledge Score			Chi Square	D. F	Table Value	Inference
	Adequate	Moderate	Inadequate				
<b>AGE</b> 20-25 25-30 30-35 Above 35	02 01 02 01	04 04 08 06	04 04 03 01	3.52	6	12.59	NS
<b>EDUCATION</b> Illiterate Upto 10 <sup>th</sup> Graduation postgraduation	04 01 01 00	08 10 04 00	04 03 03 02	13.02	6	12.59	S
<b>OCCUPATION</b> Unemployed Farmer Housewife Worker	05 00 01 00	06 14 02 00	02 04 05 01	17.05	6	12.59	S
<b>MARRIED LIFE</b> 1-5 6-10 11-16 Above 16	04 02 00 00	09 09 04 00	05 01 05 01	9.23	6	12.59	NS
<b>GRAVIDA</b> Primigravida Multigravida	05 01	13 09	01 11	10.84	2	5.99	S

**Table 2-Results in terms of association among variables**

Table 2-table represents there is significance association between education, occupation, gravida and there is no significant association between age and married life.

## Results

### Section I-Results in terms of demographic variables

The result of the study showed that maximum, 13 (32.5%) of the antenatal mothers were in the age group of 30-35 years; most of the antenatal mothers were illiterate 16 (40%) majority were having the occupation of farming 18(45%), most of the sample were having married life up to five years 18(45%) and majority were multigravida 21(52.5%)

### Section 2-Results in terms of frequency and percentage

Findings related to the knowledge regarding nursing management of urinary tract infection among antenatal mothers.

Table 2: Frequency (f) and percentage (%) distribution of knowledge scores of the Final year GNM students regarding nursing management of First stage of labour, Variables: n= 40

KNOWLEDGE	FREQUENCY	PERCENTAGE %
Adequate	06	15%
Moderate	22	55%
Inadequate	12	30%

Table 3 revealed that majority of the Antenatal women (15%) had adequate knowledge, 22 (55%) had moderate knowledge and 12 (30%) had Inadequate knowledge

### Section 3- Results in terms of association among variables

There is significance association between education, occupation, gravida and there is no significant association between age and married life.

## SUMMARY

The results reveal majority of mothers have moderate knowledge 55% and there is no significant association between education, occupation, gravida and there is no significant association between age and married life. Therefore more and more mothers should be taught regarding prevention of urinary tract infection.



## References

1. Gonzales. S, A Comparative Study to Assess the Knowledge and Attitude Towards the Preventive Measures of Urinary Tract Infection During Pregnancy Among Ante Natal Mothers Residing at Selected Urban and Rural Areas in Bengaluru With a View to Develop a Self-Instructional Module; retrieved from [www.rguhs.ac.in/cdc/onlinecdc/uploads/05\\_N267\\_38927.doc](http://www.rguhs.ac.in/cdc/onlinecdc/uploads/05_N267_38927.doc); dated 13.6.17.
- [2] U Lela, Ajman AN E, V Shaman. The Prevalence of Urinary Tract Infection among Pregnant Women Attending Antenatal Clinic at A tertiary Care Centering Alas, Al Qassim; International Journal Science and Research (IJSR) Volume 5 Issue 5, May 2016, pg no 23-27.
- [3] E Lawindi, SAYED HA, El Shafei AM , Hayek NN , Noor HH. Assessment of Urinary Tract Infections“ Risk Factors and Knowledge among Attendees of Theodor Bilharz Research Institute, Giza, Egypt International Public Health Forum;Vol.1 No.1 March 2014 .
- [4] S. Barros; Urinary tract infection during gestation and its correlation with low back pain versus nursing interventions, Rev Dor. São Paulo, 2013 abrjun;14(2):88-93
- [5] Davidson R. Michele, London L. Maricia. OLDS Maternal Newborn Nursing and Women’s Health Across the lifespan. New Jersey; Pearson Prentice Hall, 2008.
- [6] Smeltzer Suzanne C, Bare Brenda G. Brunner and Siddhartha’s textbook of medical- surgical nursing. 10th ed. Philadelphia: Lippincott Williams and Wilkins; 2004. P.1310.
- [8] Mc.Laughlin.P Sean, Carson C. Culley. Urinary Tract Infections in Women. The medical clinics of North America 2004: 88: 417.
- [9]Mazor Dray, Lew A, Schlaeffer F, Sheiner E. Maternal Urinary Tract infection: is it independently associated with adverse pregnancy outcome? J Matern Fetal Neonatal Med 2009 February; 22(2): 124-8. Available
- (10)Rahim an F M u samba M. A Review on Urinary Tract Infection in Pregnancy, International Journal of Pharmacy and Bio Sciences Feb 2 0 1 5 ; 4.