

A Descriptive Study to Assess the Knowledge regarding Prevention of Urinary Tract Infection during Pregnancy among Antenatal Mothers in a Selected Community Area Kayamkulam Kerala

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Abstract: *Pregnancy is biological, physiological and psychological stressful even for healthy women. Problems like bleeding hyperemesis gravidarum, Hypertensive disorders, Anemia, Diabetes Mellitus, Preventive measures of urinary tract infection in pregnancy, infection like toxoplasmosis, rubella, group B streptococcus, urinary tract infection will complicate the pregnancy. Percentage distribution of respondent according to knowledge .shows that the, out of 30 antenatal mother's (86.66 %) responds had excellent knowledge and (10 %) responds had good knowledge and (3.33 %) responds had poor knowledge. The data presented of table no.4 shows that there was non-significant association between, demographic variables and level of knowledge.*

Keywords: pregnancy, knowledge, Antenatal Mothers

1. Introduction

Pregnancy is biological, physiological and psychological stressful even for healthy women. Problems like bleeding hyperemesis gravidarum, Hypertensive disorders, Anemia, Diabetes Mellitus, Preventive measures of urinary tract infection in pregnancy, infection like toxoplasmosis, rubella, group B streptococcus, urinary tract infection will complicate the pregnancy. Among these urinary tract infection is the most common medical complication of pregnancy in India is 8.8%. 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. Pyelonephritis occurs in 1% to 2% of pregnancies. 1% of pregnant women will have acute cystitis.

During pregnancy, there is striking anatomical change seen in the urinary system, it is mainly due to the increased progesterone level as it relaxes the wall of the ureters and allows its dilatation and kinking, and also by the pressure from the enlarging uterus.

Urinary tract infection is caused by the pathogenic micro-organisms in the urinary tract. It is the second most common bacterial disease and the most common bacterial infection in women. As the uterus grows, because of its increased weight can block the drainage of urine from the bladder causing a stagnation of urine later causes infection. Stagnation or stagnated urine is an excellent medium for the growth of the micro-organisms. Escherichia coli are the most common pathogen causing a urinary tract infection.

Untreated urinary tract infection can lead to complication such as abortion, prematurity, low birth weight baby, still birth, preterm labour, preeclampsia, chronic pyelonephritis and rarely kidney failure. If it is treated early, then it will not harm the baby.

Prevention of urinary tract infection is through drinking minimum 8 glasses of water in a day, empty the bladder before and after the sex, wash genital area with warm in a dry, empty the bladder before and after the sex, wash genital area with warm water before sex take showers instead of bath, avoid tight fitting clothing and so on.⁵

2. Need for the 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 increase 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.⁷

According to 1997 survey, urinary tract infection accounted for nearly 7 million outpatient cases and 1 million emergency cases during pregnancy. It is resulting in 0.1 million hospitalizations. As per WHO report, 20 to 50 % of pregnant women will experience bacteria in their pregnancy, 5 to 10% of them are getting expose in their 1st pregnancy.⁸

3. 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 their selected socio-demographic variables.

3.1 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 checkups in selected hospital in Ratnagiri.

4. Methodology

- a) **Research Approach:** The approach of the study is quantitative research approach.
- b) **Research Design:** In this study descriptive research design is used to assess the level of knowledge regarding prevention of urinary tract infection among antenatal mothers.
- c) **Research of the Study:** The setting of the study is selected community area kayamkulam
- d) **Population:** The target population for this study is antenatal mothers in a selected community area kayamkulam
- e) **Sample:** Antenatal mothers who fulfill the inclusion criteria will be considered as the sample.
- f) **Sample Size:** In this study sample size will be 30 mothers.
- g) **Sampling Technique:** A non-probability purposive sampling technique used in this study.

4.1 Research Variables

Study variables

The study variables used in this study is knowledge of antenatal mothers regarding urinary tract infection.

Socio-economic demographic variables

Socio-economic demographic variable such as age, education, occupation, married life, parity.

4.2 Criteria for Sample Selection

Inclusion criteria

- Antenatal mothers who are willing to participate in this study.
- Antenatal mothers who are available during the period of data collection.
- Antenatal mothers between the ages of 20-35years
- Antenatal mothers who can read and write English and Malayalam.

Exclusion criteria

- Antenatal mothers who are not available at the time of the study.
- Antenatal mothers who are already diagnosed with

urinary tract infection.

4.3 Description of Tools

The tools consist of structured knowledge questionnaire. It is divided into 2 parts, they are as follows:

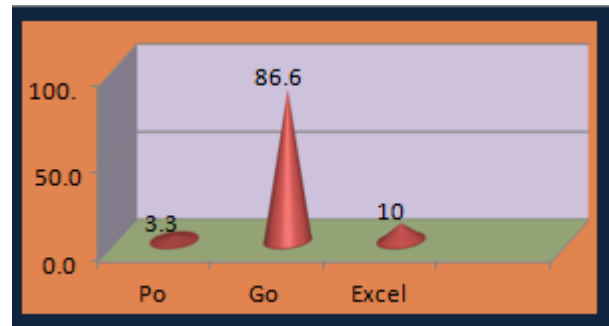
- Part I** – contain the items of demographic characteristics of antenatal mothers comprising of age, education,
- Part II** – Knowledge assessment questionnaire regarding prevention urinary tract infection during pregnancy

5. Results

1) Classification of respondents based on level of knowledge

Knowledge Level	Category	Classification of respondent	
		Number	Percentage
Poor	Below 5	1	3.33 %
Good	5-10	26	86.66 %
Excellent	Above 10	3	10 %

Percentage distribution of respondent according to knowledge shows that the, out of 30 antenatal mother’s (86.66 %) responds had excellent knowledge and (10 %) responds had good knowledge and (3.33 %) responds had poor knowledge. The data presented of table no.4 shows that there was non-significant association between, demographic variables and level of knowledge.



2) Association between levels of knowledge with socio-demographic variable

S. No	Demographic variable	Frequency	Knowledge levels		Chi-square
			< Median	>=Median	
			8	8	
1.	Age				2.82, df=3 p<7.82 NS
	a. 20-25 yrs	13	4	9	
	b. 25-30 yrs	9	2	7	
	c. 30-35 yrs	7	3	4	
	d. above 35 yrs	1	1	0	
2	Education				3.65, df=3 p<7.82 NS
	a. illiterate	1	0	1	
	b. Upto 10 th	21	10	11	
	c. Graduation	8	1	7	
	d. Post-graduation	0	0	0	
3	Occupation				0.36, df=3 p<7.82 NS
	a. Unemployed	0	0	0	
	b. farmer	4	2	2	
	c. housewife	15	5	10	
	d. worker	11	4		
4	Married life				1.71, df=3
	a. 1-5 yrs	17	6	10	

	b. 6-10 yrs	13	3	8	P<7.82
	c. 11-16 yrs	1	1	0	
	d. Above 16 yrs	0	0	0	
5	Parity				
	a. Primigravida	14	6	8	
	b. multigravida	16	5	11	

from:
<http://www.ncbi.nih.gov/pubmed/19085630>.

URL:

6. Conclusion

The overall knowledge about urinary tract infection among antenatal mother is adequate. Overall association between levels of knowledge regarding urinary tract infection with selected demographic variables such as age, education, occupation, married life, parity.

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