

Evaluation of Urinary Tract Infection Among Females Age Group (18 - 22) Years

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Abstract:- Urinary tract infection is more common in females than males. Around 50 - 60 % of women are experiencing urinary tract infections in India. Nowadays, this is a severe health problem in our society, most commonly by Escherichia coli, less commonly by Klebsiella pneumonia, Proteus mirabilis, and Staphylococcus saprophyticus. The study is designed as a questionnaire and is distributed to female students. This study was conducted to assess urinary tract infection among the female age group (18 - 22) years at Sree Ramakrishna Medical College of Naturopathy and Yogic Sciences and Hospital, Kulasekharam, Tamil Nadu, India. Verbal consent was taken from the females by explaining the purpose of the study. The total number of study respondents was 30. The questionnaire contains 30 questions. The parameters of the questionnaire included urogenital, Gastrointestinal discomforts, pain, medication, habits, personal hygiene, and cloth hygiene. This study shows that most females are not aware of the symptoms related to urinary tract infections. Therefore, females need more awareness about urinary tract infections and genital hygiene.

Keywords: Urinary Tract Infection, Stress, Genital Hygiene.

I. INTRODUCTION

Urinary tract infection is more common in females than males. Around 50 - 60 % of women are experiencing urinary tract infections in India. Nowadays, this is a severe health problem in our society due to a lack of awareness about genital hygiene, poor dietary habits, unhygienic sanitary napkins, catheterization, dehydration, long-term holding of urine urge, contraceptive device complications, most commonly by Escherichia coli, less common by Klebsiella pneumonia, Proteus mirabilis, and Staphylococcus saprophyticus, Streptococcus faecalis. Which may alter the PH level of the external genitalia and leads to increased alkalinity. These bacteria produce certain toxins that induce host cell damage which destroys genital health and promotes ascending infections such as urethritis, cystitis, ureteritis.

II. PATHOPHYSIOLOGY

The urinary tract consists of the upper Urinary tract and lower Urinary tract. This infection is more common in the lower urinary tract. Normal urine PH (4.6 - 7.6), prolonged storage of urine leads to extra growth of urea spitting bacteria, which results in high urine PH (> 7.6), because, these bacteria split urea in urine into ammonia, which can cause increased alkalinity of urine. Because of this increased alkalinity of urine favors the growth of the microorganism. Common causes such as unhygienic excretory habits, dehydration, usage of feminine products, long-term holding of urine, renal stones, Complications of using contraceptives, usage of common toilets, uncontrolled diabetes, and catheterization. Symptoms include lower abdomen pain, flank pain, lower back pain, fever with chills, tiredness, urge to urinate, cloudy urine, haematuria, itching, burning micturition, dysuria, nausea, and vomiting. The symptoms' severity may aggravate during ovulation, menstruation, and pregnancy. If untreated it can leads to severe systemic complications.

III. MATERIALS AND METHOD

The study is designed as a questionnaire and is distributed to the female age group (18 - 22) years at Sree Ramakrishna Medical College of Naturopathy and Yogic Sciences and Hospital, Kulasekharam, Tamil Nadu, India. Verbal consent was taken from the females by explaining the purpose of the study. The total number of study respondents was 30. The questionnaire contains 30 questions. The parameters of the questionnaire included urogenital, Gastrointestinal discomforts, pain, medication, habits, personal hygiene, and cloth hygiene. Those females who did not cooperate and were non-willing participants were excluded from the study.

IV. RESULT

The respondents were between the age group of (18 - 22) years. The total number of female students is n=30. Table 1.1 shows, urogenital symptoms during urinary tract infection,

Burning Sensation during micturition 28(93.33%), and do not have the burning sensation during micturition 2(6.66%). Colour changes in urine 20(66.66%), and no colour changes in urine 10(33.33%).

Table :1.1

S.NO	CONTENT	YES(%)	NO(%)
1	Burning Sensation during micturition	28(93.33%)	2(6.66%)
2	Colour changes in Urine	20(66.66%)	10(33.33%)
3	Blood in urine	4(13.33%)	26(86.66%)
4	Cloudy change	16(53.33%)	14(46.66%)
5	Bad odour	20(66.66%)	10(33.33%)
6	Increase frequency of micturition	30(100%)	Nil
7	Holding of urine urge	25(83.33%)	5(16.66%)
8	Itching sensation on external genitalia	26(86.66%)	4(13.33%)
9	Congenital anomaly	Nil	30(100%)
10	White discharge	20(66.66%)	10(33.33%)
11	Urinary Catheterization	Nil	30(100%)

Table: 1.1 urogenital symptoms during urinary tract infection

Blood in urine during micturition 4(13.33%), do not have Blood in urine during micturition 26(86.66%). Cloudy urine during micturition 16(53.33%), does not have cloudy urine during micturition. Bad odour in urine 20(66.66%), do not have a bad odour in urine during micturition. Increase frequency of micturition 30(100%). Holding of urine urge 25(83.33%), do not have this symptom 5(16.66%). Itching sensation on external genitalia 26(86.66%), and do not have itching sensation on external genitalia 4(13.33%). Having white discharge 20(66.66%), do not have white discharge 10(33.33%).

Table :1.2

S.NO	CONTENTS	YES(%)	NO(%)
1	Lower abdomen pain	15(50%)	15(50%)
2	Lower back pain	25(83.33%)	5(16.66%)

Table :1.2 pain during urinary tract infection

Table 1.2 shows, Lower abdomen pain during urinary tract infection 15(50%), and do not have lower abdomen pain during urinary tract infection 15(50%). Lower back pain during urinary tract infection 25(83.33%), and do not have lower back pain during urinary tract infection 5(16.66%).

Table :1.3

S.NO	CONTENT	YES(%)	NO(%)
1	Symptoms of nausea, vomiting	5(16.66%)	25(83.33%)
2	Constipation	15(50%)	15(50%)

Table: 1.3 gastro intestinal symptoms during urinary tract infection

Table: 1.3 shows, symptoms of nausea, and vomiting during urinary tract infection 5(16.66%), do not have the symptoms of nausea, and vomiting during urinary tract infection 25(83.33%). Constipation during urinary tract infection 15(50%), do not have constipation during urinary tract infection 15(50%).

Table: 1.4

S.NO	CONTENT	YES(%)	NO(%)
1	Water intake 3- 4 litres of water per day	Nil	30(100%)
2	Intake more than 2 cups of tea or coffee	27(90%)	3(10%)
3	Junk food Intake	30(100%)	Nil
4	Non- vegetarian food in daily diet	30(100%)	Nil

Table: 1.4 other habits

Table 1.4 shows, the other habits such as no one drinking 3- 4 liters of water per day 30(100%). Intake of more than 2 cups of tea or coffee 27(90%), and do not have the habit of intake more than 2 cups of tea or coffee 3(10%). Everyone is taking junk food 30(100%). Non- vegetarian food in daily diet 30(100%).

Table: 1.5

S.NO	CONTENT	YES(%)	NO(%)
1	Feminine hygienic products usage	17(56.66%)	13(43.33%)
2	Wear tight inner garments	27(90%)	3(10%)
3	Changing more than 4 sanitary pads during menstruation	13(43.33%)	17(56.66%)
4	Sharing of towel	4(13.33%)	26(86.66%)
5	Common toilets usage	30(100%)	Nil
6	symptoms of Fungal Infection	26(86.66%)	4(13.33%)

Table: 1.5 genital hygiene

Table 1.5 shows, Feminine hygienic products usage 17(56.66%), and do not use feminine hygienic products 13(43.33%), Wear tight inner garments 27(90%), do not wear tight inner garments 3(10%). Changing more than 4 sanitary pads during menstruation 13(43.33%), and do not change more than 4 sanitary pads during menstruation 17(56.66%), Sharing of towel to others 4(13.33%), do not share towel with others 26(86.66%).

Table: 1.6

S.NO	CONTENT	YES(%)	NO(%)
1	Drug allergy	2(6.66%)	28(93.33%)
2	Hormone replacement therapy	2(6.66%)	28(93.33%)

Table: 1.6 medication

Table :1.6 shows, drug allergy 2(6.66%), and do not have drug allergy 28(93.33%), Undergone hormone replacement therapy 2(6.66%), do not undergone Hormone replacement therapy 28(93.33%).

Table: 1.7

S.NO	CONTENT	YES(%)	NO(%)
1	Shivering	15(50%)	15(50%)
2	Rise of body temperature at evening	20(66.66%)	10(33.33%)
3	Renal Complaints	Nil	30(100%)

Table: 1.7 other symptoms

Table: 1.7 shows, Shivering 15(50%), and do not have shivering 15(50%). The rise in body temperature in the evening is 20(66.66%), and do not have the rise in body temperature in the evening is 10(33.33%).

V. DISCUSSION

Burning Sensation during micturition 28(93.33%), more females have a burning sensation. Most females have an increased frequency of micturition 30(100%). Holding of urine urge 25(83.33%), Most of the females having the habit of holding urine urge. Colour changes in Urine 20(66.66%), the majority of females have these colour changes in their urine. Cloudy urine during micturition 16(53.33%), Bad odour in urine 20(66.66%). Itching sensation on external genitalia 26(86.66%), white discharge 20(66.66%), and 50% of females having lower abdomen pain during urinary tract infection. 25(83.33%) of females have lower back pain during urinary tract infections. 50% of females have constipation during urinary tract infections. No one drinks 3-4 liters of water per day. Intake of more than 2 cups of tea or coffee 27(90%), most of the females having the habits of intake more than 2 cups of tea or coffee. Everyone is taking junk food 30(100%). Non- vegetarian food in daily diet 30(100%). Feminine hygienic products usage 17(56.66%), more females using feminine hygienic products. The majority of females wear tight inner garments 27(90%). Most of the females do not have the habit of changing 4 sanitary pads per day 17(56.66%). Most of the females have fungal infection 30(100%). 50% of the females having shivering and low-grade fever in evening 20(66.66%).

VI. CONCLUSION

This study shows that most females are not aware of the symptoms related to urinary tract infections. Urogenital symptoms and gastrointestinal discomforts are more. Therefore, females need more awareness about urinary tract infections and genital hygiene.

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