

## A cross sectional study on knowledge, attitude & practice towards personal hygiene in women with urinary tract infection and providing patient counselling in esi hospital bangalore

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Article History	Abstract
Received on: 05-04-2019 Revised on : 18-04-2020 Accepted on : 24-05-2020	Background: Personal hygiene is significant in Urinary tract infections (UTIs) and is the most frequent bacterial infections. Health-care professional plays key role in the patient counselling and also in community health. Poor socioeconomic status, having lack of education and no awareness of personal hygiene in UTI, they tend to neglect symptoms and ultimately face complications. Aim and Objectives: This study is to estimate the Knowledge, Attitude, and Practice (KAP) in women with UTI, providing patient counselling on personal hygiene in UTIs.
<b>Keywords</b> Knowledge, Attitude, Urinary tract Infection, Prevention.	Methods: It is a Prospective, Cross-sectional and Observational study with sample sizes of (N = 155) women with poor personal hygiene in UTI patients. Questionnaire was used to assess the KAP of UTI patients, the data were collected, scored and then the results were statistically analyzed and compared. Results: The study revealed that (85) 54.8% women had poor Knowledge and (91) 58.7% of sample had Poor Attitude. Regarding practice it is very poor (99) 63.8% and when comparing with 3 criteria KAP, practice is very poor than knowledge and attitude towards personal hygiene in Urinary tract infection. Conclusion: This study concluded that knowledge enhancement program related to personal hygiene in UTI and improve good practices. Establishing patient counselling centres in hospital and educating them would improve their current level of knowledge and makes them competent enough for the public health-care service in future.
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### Introduction

#### Background

Personal hygiene is common, important which we neglect and Urinary tract infection (UTI) is caused by microbes including bacteria, fungi and viruses. Bacteria are the most familiar reason of UTIs. UTIs occur more commonly in women than men. In our body UTIs are the second majority frequent type of infection [1,2]. In India

maximum people are from rural population and are from low socioeconomic status, malnutrition, poor hygiene, with lack of education and awareness of UTI are associated with UTI in rural settings, they tend to neglect symptoms and ultimately face complications [3]. Hence the present study is undertaken to assess the knowledge, attitude, practice towards personal hygiene in women with urinary tract infection and providing patient counselling. Evidence-based practice of medicine,

including the development and implementation of clinical practice guidelines, has increasingly been advocated. KAP model (knowledge-attitudes-practice). The uncomplicated UTIs are caused because of *Escherichia coli*, which accounts for 85% of community acquired infections. Additional causative organisms in uncomplicated type includes *Staphylococcus* species, *Klebsiella pneumoniae*, *Proteus* spp., *Pseudomonas aeruginosa*, and *Enterococcus* species [4]. Health-care professional plays main role in educating the patient about personal hygiene in the disease. Counselling is done to the patients about their disease, signs, symptoms, drug use, dose and its adverse reaction. Pharmacists can be consider as the most important resources in health system and may have a great impact on the public health[5]. There is only few studies considering women knowledge, attitude, and practice (KAP) regarding counseling about personal hygiene in UTI patients. We assessed the KAP study to improve the public health. "KAP" study measures the KAP of a community. It serves as an educational diagnosis of the community. The main purpose of this KAP study is to explore changes in KAP of the community, paramedical personnel, and medical practitioners. UTIs are over diagnosed and treated in older people and narrow-spectrum antibiotics are generally preferable to broad-spectrum agents [6]. The prescribing pattern of prophylactic agents for treatment of UTIs is not evidence based which results in failure of therapy [7].

Most Common Agents and Dosing for the Treatment of UTIs			
Agent	Dosing Regimen	Duration	Comments
Trimethoprim-sulfamethoxazole (TMP-SMX) 800/160 mg	2 x daily	3 days	First-line agent; caution with local resistance rates of >10%-20%
Ciprofloxacin 250 mg	2 x daily	3 days	No more effective; may be useful with TMP-SMX resistance
Levofloxacin 250 mg	Every day	3 days	No more effective; may be useful with TMP-SMX resistance; expensive
Amoxicillin 500 mg	2 x daily	3 days	Resistance limiting its use
Amoxicillin-clavulanate 500/125 mg	2 x daily	3 days	Preferred penicillin if resistance a concern
Nitrofurantoin 100 mg	Every 6 hours	3 days	Not as effective; second-line agent; better reserved in low dose for prophylaxis

Adapted from reference 4.

### Aim and Objectives

1. To assess knowledge, attitude and practices of women regarding personal hygiene in Urinary tract infection (UTI) and its prevention
2. To find the association between knowledge & attitude with selected demographic variables among women regarding personal hygiene in Urinary tract infection (UTI) and its prevention.

### Methodology

#### Study sample

155 patients with age group of 15-70 years and with poor personal hygiene in UTI were considered into the study. [N=155 Patients.]

#### Study Design

It is A Prospective Observational and Cross sectional Study.

#### Study Period

The present study was conducted for a period of 6 months from October 2019 to March 2020.

#### Study site

The present study was conducted in ESI Hospital, Bangalore, Karnataka, India.

### Study Criteria

#### Inclusion criteria

1. The female patients who are willing to participate in the study and who are suffering with Poor hygiene in UTI are included.
2. Age group between 15 to 65 years were included in the study.

#### Exclusion criteria

The patients who are not willing to participate and who are not suffering from UTI are excluded.

### Source of Data

#### Method of collection of data

All the patients satisfying the inclusion criteria were selected after explaining the study to the subjects then included in the study. Informed Consent was taken from each and every patient.

#### Statistical tools

The study was conducted on 155 women with poor personal hygiene and having symptoms of UTI. The structured questionnaire was used to collect data about demography, knowledge and attitude about the personal hygiene in urinary tract infection and its prevention. The obtained data tabulated and analysed in terms of objectives of the study, by using inferential and descriptive statistics.

Questionnaire about personal hygiene:

S.No	Questionnaire
1.	In 24 hours, how many times u go to toilet <input type="checkbox"/> 1-4 times <input type="checkbox"/> 4-8 times <input type="checkbox"/> more than 8 times
2.	Do you have pain during urination <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> most of the time
3.	Do you wash your underwear separately from your other clothes <input type="checkbox"/> Yes <input type="checkbox"/> No
4.	Do you wash your underwear with <input type="checkbox"/> Water only <input type="checkbox"/> Soap <input type="checkbox"/> Detergent powder <input type="checkbox"/> Detergent liquid
5.	Do you wash the inner part of Labia Majora <input type="checkbox"/> Yes <input type="checkbox"/> No
6.	Do you think being unhygienic causes UTI? <input type="checkbox"/> Yes <input type="checkbox"/> No.
7.	Do you wear panty liners/ mini pads <input type="checkbox"/> Yes <input type="checkbox"/> No
8.	If yes, how frequent do you change your panty liners No Change required <input type="checkbox"/> 1 time <input type="checkbox"/> 2 -3 times <input type="checkbox"/> 4-5 times
9.	Whether regular health checkup would helpful in case of UTI?

	<input type="checkbox"/> Yes <input type="checkbox"/> No
10.	Do you educate the UTI patients about the preventive measures? <input type="checkbox"/> Yes <input type="checkbox"/> No

Questionnaire about KAP of UTI

Knowledge	Attitude	Practice
Do you know what UTI is and do you think UTIs are serious? <input type="checkbox"/> Yes <input type="checkbox"/> No	Do you think that drinking plenty of water helps in reducing the cause of UTI? <input type="checkbox"/> Yes <input type="checkbox"/> No	Do you educate the patient about hygiene? <input type="checkbox"/> Yes <input type="checkbox"/> No
What is the most common cause of UTIs? a. Bacteria b. Protozoa c. Fungi d. Hygiene.	Do you think using antibiotics helps in the management of UTI? <input type="checkbox"/> Yes <input type="checkbox"/> No	Do you suggest patients what food they have to take? <input type="checkbox"/> Yes <input type="checkbox"/> No
Do you know the treatment of UTIs is? <input type="checkbox"/> Yes <input type="checkbox"/> No	Do you think Vitamin C and antioxidant-rich food may prevent UTI? <input type="checkbox"/> Yes <input type="checkbox"/> No	Do you educate patients regarding the cause of UTI? <input type="checkbox"/> Yes <input type="checkbox"/> No
Do you know the organism which is the cause for majority of UTI cases? a.E.coli b. Mycobacterium bovis c.Hepatitis-B virus d.Mycoplasma.	Do you think men are more prone to UTI? <input type="checkbox"/> Yes <input type="checkbox"/> No	Do you educate the patients about risk factors proper medications and complications of UTI? <input type="checkbox"/> Yes <input type="checkbox"/> No
Do you know what dysuria, hematuria, proteinuria is? <input type="checkbox"/> Yes <input type="checkbox"/> No	Do you think only bacteria causes UTI? <input type="checkbox"/> Yes <input type="checkbox"/> No	Do you educate them regarding the non pharmacological aspects in the treatment of UTI? <input type="checkbox"/> Yes <input type="checkbox"/> No

**Results**

Table :1 Basic demographic details of the patient

S.No	Demographic Details	Number	Percentage
1.	Age 15- 25 Years	8 49	5.1%

	25-35 Years 35-45 Years 45-55 Years 55-65 Years >65 Years	56 18 10 14 9	31.6% 36.1% 11.6% 6.4% 9%
2.	<b>Gender</b> Female Male	101 54	65.1% 34.8%
3.	<b>Education</b> Literate Illiterate	98 57	63.2% 36.7%
4.	<b>Employment status</b> Employed Unemployed Others	45 90 20	29% 58% 12.9%
5.	<b>Marital status</b> Married Unmarried	99 56	63.8% 36.1%
6.	<b>Antibiotics used</b> Yes No	90 65	58% 41.9%
7.	<b>Previous History of UTI</b> Yes No	44 111	28.3% 71.6%

Table:2 Clinical Manifestations of UTI

S.No	Clinical Manifestations	Number	Percentage
1.	A strong, persistent urge to urinate.	27	17.4%
2.	Burning micturation	40	25.8%
3.	Oliguria	43	27.7%
4.	Urinary Incontinence	35	22.5%
5.	Urine that appears cloudy.	10	6.4%

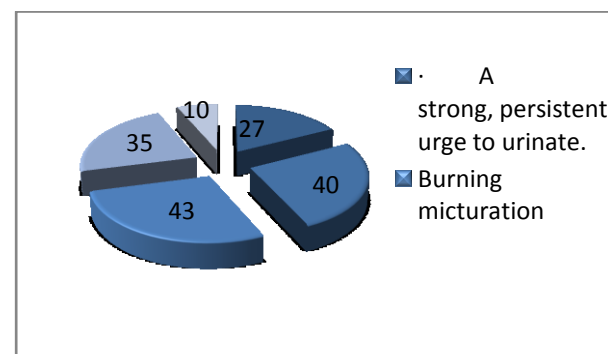


Figure:1 Clinical manifestations about personal hygiene in UTI

Table: 3 KAP Status of Personal hygiene in UTI

S.No	Criteria	Knowledge	Attitude	Practice
1.	Poor	85 (54.8%)	91 (58.7%)	99 (63.8%)
2.	Average	44 (28.3%)	45(29%)	35 (22.5%)
3.	Good	26 (16.7%)	19 (12.2%)	21 (13.5%)

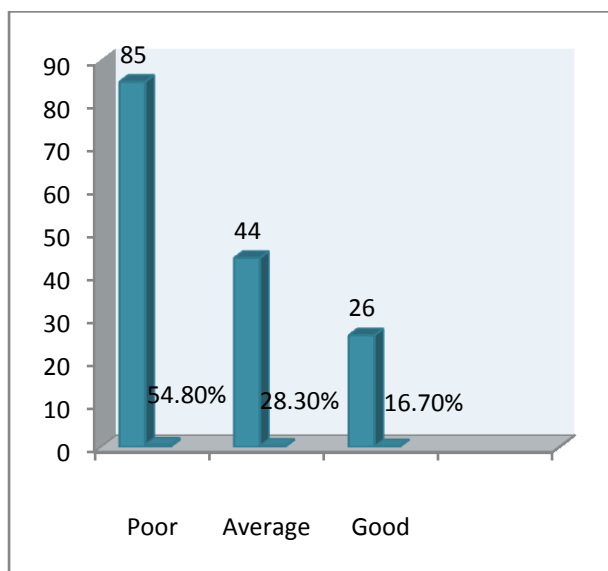


Figure: 2 Knowledge about personal hygiene in UTI

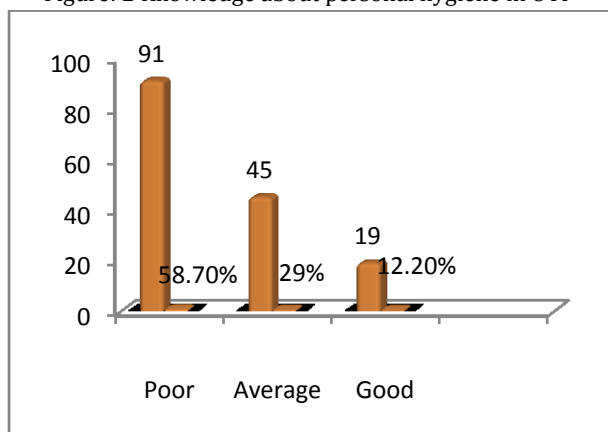


Figure: 3 Attitude about personal hygiene in UTI

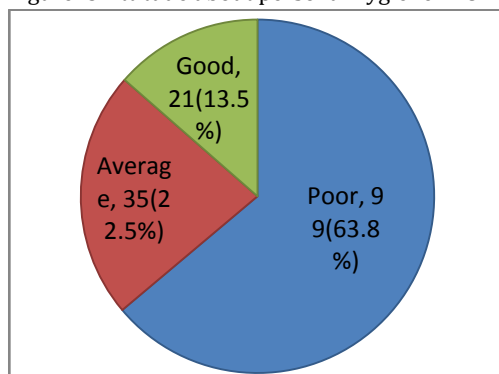


Figure:4 Practice about personal hygiene in UTI

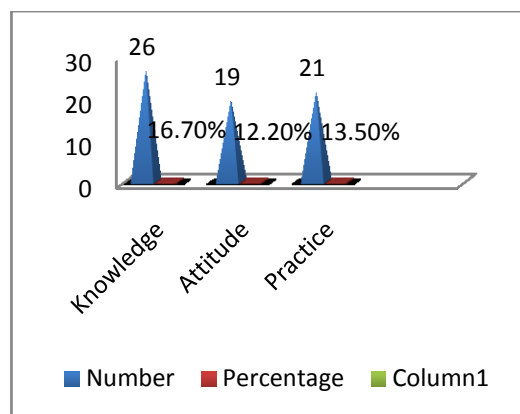


Figure: 5 Comparison of Knowledge, Attitude and Practices

## DISCUSSION

With regard to the demographics, in the present study majority samples 56 (36.1%) were in the age group of 25-35 years among females 101(65.1%). A similar study conducted at Nepal shown that 41.46% were in between the age group of 22 - 25 years<sup>8</sup>. Both studies are significant with present study. In present study researcher found that majority of the patients has got poor Knowledge (54.8%) and (58.7%) are got Poor attitude and 63.8% have poor practices about the personal hygiene. A similar study conducted at Nepal revealed that 65.05% had good knowledge and 24.39% had poor knowledge regarding urinary tract infection [8]. It is significant with present study. A parallel study conducted at Egypt shown that 44% of the respondents had poor knowledge regarding urinary tract infection which is contradicted with present study<sup>9</sup>.

## Conclusion

The study concluded that women with UTI have poor knowledge, poor attitude and poor practices about personal hygiene towards urinary tract infection and its prevention. Knowledge enhancement program may change their attitude in to practice. Females are mostly at increased risk of having UTI, and *Escherichia coli* were the leading isolate causing UTI. Although the flouroquinolones were the most active antibacterial agents, use of antibiotics is mandatory to prevent complications. Educating them regularly would improve their current level of knowledge and makes them competent enough for the public healthcare service.

## Recommendations

### Patient Counselling Points

- ✓ Life style modifications:
- ✓ Ensure to have adequate sleep. This reduces stress level.
- ✓ Drinking Lots of Fluids: This may help wash out bacteria from the bladder.
- ✓ Cranberry Juice may prevent UTIs but it has never been proven with evidence.

- ✓ Birth Control - Avoid diaphragms, spermicide or unlubricated condoms Change
- ✓ Urinate whenever you have the urge, do not hold it urinate soon after sex to flush bacteria that may have been pushed into the urethra

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### **Conflict Of Interest**

None declared

### **Ethical Approval**

The study was accepted and approved by the Institutional Ethics Committee.

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