

# Assessment of Women Patients Practices toward recurrence Urinary Tract Infection (UTI).

## تقييم ممارسات النساء المريضات بالتهابات المسالك البولية المتكررة

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### الاهدأ :

لتقييم ممارسات النساء المريضات بالتهابات المسالك البولية المتكررة  
**منهجية البحث:** اجريت دراسة وصفية في ثلاث مستشفيات تعليمية في مدينة بغداد (الكاظمية، اليرموك، الجراحات التخصصية) للمدة من بداية شهر شباط لسنة ٢٠٠٨ ونهاية شهر نيسان ٢٠٠٩. صممت استمارة استبانة مكونة من جزئين، الجزء الاول الصفات الشخصية، والجزء الثاني ممارسات لتقييم ممارسات النساء المصابات بالتهابات المسالك البولية المتكررة والتي لها علاقة بالنظافة، تناول السوائل، عادات التبول، والعلاج. استخدم الباحث الاحصاء الوصفي والتحليلي لتحليل البيانات  
: اظهرت نتائج البحث بان ممارسات النساء المصابات بالتهابات المسالك البولية والتي لها علاقة بالنظافة، شرب السوائل، عادات التبول، العلاج، ضعيفة وغير مقنعة.  
**التوصيات:** توصي الدراسة بتحضير كتيب في العيادات الاستشارية لامراض الجهاز البولي يحتوي على جميع الممارسات التي تحتاجها النساء المصابات بالالتهابات المتكررة للمسالك البولية المتكررة والتي تجعلها تعيش حياة طبيعية.

### **Abstract:**

**Objective:** to assess of women patients practices toward recurrence urinary tract infection (UTI).

**Methodology:** A descriptive study was carried out at three Hospitals (Al-Kadhimia, Al-Yarmok, and Surgical Specialist Teaching Hospital) in Baghdad city from the beginning of Feb., 2008 to the end of April 2009. The Questionnaire was designated into two parts; the first part consisted of demographic data and the second part related to women patients' practices toward recurrent urinary tract infection (UTI) concerning hygiene, fluid intake, voiding habits, and therapy.

The researcher used appropriate statistical methods in data analysis which included descriptive and inferential data analysis.

**Results:** the findings of the study indicated that the women patients' practices related hygiene, voiding habits, fluid intake, and therapy were poor and unsatisfactory.

**Recommendation:** A manual booklet should be prepared in the clinic consultation of urinary system disease including all practices needed for women patients with recurrent (UTI) lead them to live as a normal.

## **Introduction:**

Urinary tract infection(UTI)is the second most common clinical indication for empirical anti microbial treatment in primary and secondary care[1].(UTI)is a bacterial infection of kidney and urinary tract which can recur again if not diagnosed early and treated effectively [2]. They are a serious health problem affecting millions of people each year [3].In 1997 urinary tract infection accounted about 8.3 million doctor visits[4]. (UTI)can present as a single uncomplicated episode or they may present with recurring and persistent problems occasionally,life threatening situations develop from uncontrolled urosepsis .female are more commonly affected than males. about 4% of young adult females are affected with the incidence rising with age to 7% at 50 years in the adult male the incidence is low until late adulthood when bladder outlet obstruction predisposes to infection and other problems the incidence is approximately equal amongst male and female[5]the common causes of (UTI)is bacterial from the bowel that lives on the skin near the rectum when can spread and enter they travel up ward and causing infection in the bladder sometime other parts of the urinary tract other factors may also increase risk developing (UTI)including menopause, and diabetes [6,7].(UTI)is a common problem seen in community practices as well as in hospital, upper (UTI)with fever and loin pain is more serious than lower tract infection and requires appropriate antimicrobial therapy in recurrent and persistent infection a full work-up to exclude the underlying cause and treatment of the later prevent relapses of infection . timely nephrectomy often makes the differences between life and death (5.7).urinary culture is currently considered the gold standard for diagnosing a(UTI)[8].the nurse is the most associated person who provides the information and a basic role , by instructing the patient doing laboratory and diagnosis test, regular, visiting to consultation clinic for urological diseases and education patient about personal hygiene,fluid intake,vomiting habits, and therapy for this reason the researcher went to assess of women practices towards recurrent (UTI)

## **Objectives of the study:**

- 1-To assess the women practices toward recurrent urinary tract infection.
- 2-To find out the relationship between women practices of (UTI) and some certain variable, such as age, level of education.

## **Methodology**

A descriptive study was carried at three hospitals, AL-Kadhimia, AL-Yarmk, and surgical specialities, teaching hospitals the period between beginning of april 2008 to the end of January 2008 to assess the women patient practices toward recurrent (UTI).

A non probability (purposive) sample of (100) women who were all ending hospital distribution of (24) from AL-Kadhimia hospital (26)women from AL-Yarmk teaching hospital and (50)women from surgical specialist hospital

Criteria of sample:-

- adult women (18 - >48) years
- diagnosed as recurrent (UTI) by physician

The study instrument was constructed particularly by the researcher for the purpose of the study, the construction was based on the extensive review of relevant literature and related studies the questionnaire which was developed in this study consisted of (19)

items. the first (4) items were concerned with demographic information data which, Age, marital studies, level of education occupation studies ,the next (5) items were cocerned hygiens, (3)items were related fluid intake, (3) item were related roiding habitis, the remaining (4)items were concerned therapy these items were rated on a scale of close-ended response(Yes, No) sacored as (2) for Yes and (1) for No, the cut of patient was (1.5) of all items validity of questionnaire was response through band of (10) experts had reviewed it and comments and suggestion relative to revision for a few items.

The reliability of questionnaire was determined through test and retest data were an all zed through thee description statistics (frequencies, percentage, mean of score, and inferential statistics (t-test, chi-square).

-mean of score ( $< 1.5$ ) was considered low mean of scores, ( $1.5 - 2.5$ ) was considered moderate and ( $> 2.5$ )was considered highly. Mean of scores [9]

## Result

Table (1): characteristics of the sample

NO	Characteristic of sample	frequency and percentage freq &%
1-	Age	38
	18-38	20
	38-47	14
	48>	28
2-	Marital status	
	married	64
	Un married	28
	widowed	8
3-	Level of education	
	Not read and write	18
	Read and write	8
	Primary school Graduate	8
	Intermediate school Graduate	18
	Secondary school Graduate	22
	Institute and college educate	26
4-	Occupational status	
	Governmental employee	32
	Self employee	20
	House wife	38
	retired	6
	student	4

This table shows that the distribution of age (38%) who were (18-27) years old, (64%) of them were married, (26%) of them were institute and college, and occupation status were (28%) house wife.

Table -2- distribution of (100) patient women with recurrent urinary tract infection (UTI) concerning hygiene

NO	items	Yeas (2) freq. and %	NO(1) freq. and %	MS	Severity
1-	Shower rather ,than both in tub	40	60	1.4	L
2-	After each bowel movement clean perineum and ureathal meatus from front to back	20	80	1.2	L
3-	Dry the perineum area after each urination	20	80	1.2	L
4-	Change under wear daily	40	60	1.4	L
5-	cLean under wear clother lonely then appeare under sun shine or use iron for dry it.	78	22	1.4	M

This table indicates that the mean of score .on item (5) is moderate and the remaining items are low mean at scores (1, 2, 3, 4)

Table -3-: Distribution of (100) women patients with recurrent (UTI) related to fluid intake

NO	items	Yeas f&%	NO f&%	MS	severity
1-	Drink libral of fluid daily	40	60	1.4	L
2-	A void heavy drink coffe,tea	50	50	1.5	M
3-	Avoid heavy drink beverage such as colas	22	78	1.2	M

This table shows that the mean of score on items (2) is moderate and remaining item are low mean of scores (1,3)

High :H

Moderate :M

Low :L

Table -4-: Distribution of (100) women patients with recurrence (UTI) related to voiding habits

NO	items	Yeas f&%	NO F&%	M.S	severity
1-	Void every 2-3 hour during completely empty the bladder	40	60	1.4	L
2-	Void immediately after sexual inter course	20	80	1.2	L
3-	Take the prescribed single dose or on oral antimicrobid agent after sexual intercourse	18	64	1.4	L

This table shows that the mean of score on all items are low (1, 2, 3)

Table -5-: Distribution of (100) women patients with recurrent (UTI) related to therapy

NO	items	Yeas (2)F&%	NO F&%	M.S	Severity
1-	Take medication exactly as prescribed	10	90	1.1	L
2-	If bacteria continue to appear in the urine long-term antimicrobial therapy may require	20	80	1.2	L
3-	For recurrent infection consider acid(vitamin)daily or cranberry juice	58	42	1.6	M
4-	notify the primary health care provider if fever occurs symptoms persist	20	80	1..2	L

This table shows that the mean of score on items (1, 2, and 4) are low and remaining is moderate.

Table -6-: association between the dolmens (hygiene, fluid intake, voiding habits, and therapy and women patients with (UTI) Age.

Hygiene	L		M		H		Total		X <sub>2</sub>	Sig
	F	%	F	%	F	%	F	%		
Age										
18 -27	8	8.00	8	8.00	22	22.00	38	38.00	26.963	S
28 -37	4	4.00	4	4.00	12	12.00	20	20.00		
38 -47	9	9.00	2	2.00	3	3.00	14	14.00		
48>	21	21.00	3	3.00	4	4.00	28	28.00		
Total	42	42.00	17	17.00	41	41.00	100	100.00		
fluid intake	L		M		H		Total		X <sub>2</sub>	sig
	F	%	F	%	F	%	F	%		
Age										
18 -27	11	11.00	10	10.00	17	17.00	38	38.00	3.897	N.S
28 -37	7	7.00	7	7.00	6	6.00	20	20.00		
38 -47	6	6.00	4	4.00	4	4.00	14	14.00		
48>	7	7.00	12	12.00	9	9.00	28	28.00		
Total	31	31.00	33	33.00	36	36.00	100	100.00		
voiding Habits	L		M		H		Total		X <sub>2</sub>	Sig
	F	%	F	%	F	%	F	%		
Age										
18 -27	11	11.00	11	11.00	16	16.00	38	38.00	10.739	N.S
28 -37	6	6.00	9	9.00	5	5.00	20	20.00		
38 -47	8	8.00	4	4.00	2	2.00	14	14.00		
48>	12	12.00	7	7.00	9	9.00	28	28.00		
Total	37	37.00	31	31.00	32	32.00	100	100.00		
therapy	L		M		H		Total		X <sub>2</sub>	Sig
	F	%	F	%	F	%	F	%		
Age										
18 -27	7	7.00	16	16.00	15	15.00	28	28.00	20.059	N.S
28 -37	6	6.00	6	6.00	8	8.00	20	20.00		
38 -47	3	3.00	5	5.00	6	6.00	14	14.00		
48>	5	5.00	13	13.00	10	10.00	28	28.00		
Total	21	21.00	40	40.00	39	39.00	100	100.00		

$P \leq 0.05$  d f = 6 crib = 12. 59

This table indicated that there is a significant association between of women patient with recurrent (UTI) and hygiene domain, and there is no significant association with fluid intake, voiding habits, and therapy domains

Table -7- association between the dolmens (hygiene, fluid intake, voiding habits, and therapy and women patients with (UTI) Age. level education

Hygiene	L		M		H		Total		X <sub>2</sub>	Sig
	F	%	F	%	F	%	F	%		
Level Of educatio										
Not read and write	12	12.00	5	5.00	1	1.00	18	18.00	11.739	N.S
read and write	4	4.00	2	2.00	2	2.00	8	8.00		
Primary school Graduate	5	5.00	2	2.00	1	1.00	8	8.00		
intermediate school Graduate	9	9.00	5	5.00	4	4.00	18	18.00		
secondary school Graduate	11	11.00	5	5.00	6	6.00	22	22.00		
Instituted and college Graduate	6	6.00	10	10.00	10	10.00	26	26.00		
Total	47	47.00	29	29.00	24	24.00	100	100.00		
Fluid intake	L		M		H		Total			
Level Of education	F	%	F	%	F	%	F	%		
Not read and writ	10	10.00	6	6.00	2	2.00	18	18.00	11.739	N.S
read and write	3	3.00	2	2.00	3	3.00	8	8.00		
Primary school Graduate	2	2.00	3	3.00	3	3.00	8	8.00		
intermediate school Graduate	7	7.00	5	5.00	6	6.00	18	18.00		
secondary school Graduate	8	8.00	9	9.00	5	5.00	22	22.00		
Instituted and college Graduate	5	5.00	8	8.00	13	13.00	26	26.00		
Total	35	35.00	29	33.00	32	32.00	100	100.00		



Table (7) continue

Voiding Habits Level Of education	L		M		H		Total		X <sub>2</sub>	Sig
	F	%	F	%	F	%	F	%		
Not read and write	7	7.00	6	6.00	5	5.00	18	18.00	11.739	N.S
read and write	4	4.00	2	2.00	2	2.00	8	8.00		
Primary school Graduate	2	2.00	3	3.00	3	3.00	8	8.00		
intermediate school Graduate	6	6.00	6	6.00	6	6.00	18	18.00		
secondary school Graduate	4	4.00	12	12.00	6	6.00	22	22.00		
Instituted and college Graduate	9	9.00	9	9.00	8	8.00	26	26.00		
Total	32	32.00	38	38.00	30	30.00	100	100.00		
Therapy Level Of education	L		M		H		Total		X <sub>2</sub>	Sig
	F	%	F	%	F	%	F	%		
Not read and write	2	2.00	8	8.00	8	8.00	18	18.00	11.739	N.S
read and write	1	1.00	3	3.00	4	4.00	8	8.00		
Primary school Graduate	1	1.00	2	2.00	5	5.00	8	8.00		
intermediate school Graduate	2	2.00	4	4.00	12	12.00	18	18.00		
secondary school Graduate	0	0	2	2.00	20	20.00	22	22.00		
Instituted and college Graduate	1	1.00	6	6.00	19	9.00	26	26.00		
Total	7	7.00	25	25.00	68	68.00	100	100.00		

$P \leq 0.05$  (rite = 18-3) df =10

This table indicates that there is no significant association between level of education of women patients with recurrent (UTIs) and hygiene, fluid intake, voiding habits and therapy domains.

## Discussion:

The finding showed that the majority of the study samples were married (64%), (28%) unmarried, while only (8%) were widowed regarding their age group the most of the sample (18-27) were years old while only (14%) were older than (38-47).

Regarding their level of education the most of them were institute and college graduate and the accounted (26%) their jobs house wife and they were accounted (38%). Table(1) the women patient practices with recurrent (UTI) concerning hygiene indicated that the women practices got moderate mean scores in item (5) clean under wear clothes lonely then appears under sun shine or use iron for dry out .

This finding is supported by <sup>(10, 11, 13)</sup> which states that to prevent and destroyed or kill bacteria.

Concerning items (1,2,3,4) the women practices got low mean of scores this finding and disagree by many other <sup>(10,13)</sup> who reported that the women practices must prefer shower than bathing tube because bacteria in the bath water may enter the urethra then after each bowel clean the perineum area from front to back this will help produce concentration of pathogens of urethral opening and in the women the vaginal opening dry the perineum area after each urination to prevent and decrease bacteria change under wear daily , to limitation of bacteria (Table-2-) the women with recurrent (UTI) practices related fluid intake indicated that the men got moderate mean of score in item (2) avoid heavy drink coffee, tea the finding supported by many others <sup>(12,13)</sup> who reported to prevent urinary tract irritation concerning items (1,3) the finding disagree by many authors <sup>(12,13)</sup> revealed that drink liberal amount of fluid daily to flush out bacteria .

Avoid heavy drink beverage such as, colas to prevent urinary tract irritation (Table-3) the women practices with recurrent (UTI) related to voiding habits that the women got low mean of scores in all items (1,2,3) this finding disagree with many authors <sup>(13,14, 15, 17)</sup> who reported that the voiding every 2-3 hours during the day and completely empty of the bladder this prevent over distention on the bladder then voiding immediately and take the prescribed antimicrobial agent after sexual intercourse this prevent and flush out bacteria (Table-4-).

The women with recurrent (UTI) practices related to therapy indicated that the women practices got moderate in item (3) for recurrent infection consider acidification of the urine through ascorbic acid (vitamin C) daily or Granbury juice, this finding is supported by many authors <sup>(13,14, 19, 20)</sup> who reported that to prevent colorization per urethral are and recurrence of infection while the women practices got low mean of scores in item (1, 2, 4) this finding disagree with many authors <sup>(13,14, 16, 18)</sup> who reported that must be doing from the women to prevent recurrence (UTI) and any complication Table (5).

There were as infection relationship between the age of women practices with recurrent (UTI) concerning hygiene especially for age group between (18-27) year old and no signification others domains (fluid intake, voiding habit, and therapy Table-6-

There were an on signification relationship between the level education and the women practices with recurrent (UTI) Table-7-.

**Conclusion:**

From the results of the present study the researcher concludes that:

- 1- The adult women were highest age group ranged (18-27) year old.
- 2-most of them (64%) were married.
- 3-most of them (26%) were institute and college graduate.
- 4- The highest of the study sample (38%) were house wife.
- 5- The study confirmed that the most of the study sample had poor practices to prevent recurrent (UTI).
- 6- The study indicated that there was as signification associated between the age of women practices with recurrent (UTI) concerning hygiene and Non signification to the remain domain (fluid intake, voiding habits, therapy).
- 7- The study indicated that there was no signification associated between the level of education and women practices with recurrent (UTI).

**Recommendation:**

- 1- Lecture sessions must be given to visitor patients regarding cleanliness and hygiene of the UTI to prevent complications and to promote health.
- 2- A manual or simple book let should be prepared in their clinic consultation of urinary system diseases including all practices needed for women patients with recurrent (UTI) lead them to live as normal
- 3- Increase health education with focusing on the urinary tract infection and its complication through the mass media such as T.V program, radio, newspaper.

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