RESULTS

The aim of study was to assess the self care measures used by pregnant women for urinary tract infection**.** The research question was: What are self care measures uses by pregnant women for urinary tract infection? Finding of this study are presented in the following parts:

Part (I) Tables from (1-4) represent Demographic Characteristic, and Daily habits of the study groups

Part (II) Tables from (5-7) represents pregnant women's knowledge about Urinary Tract Infection.

Part (**III**) Tables from(8-12) represent Assessment of UTI Symptoms, Self Care measures and Effect of Self Care on Relieving Symptoms, Harmful Effects or Discomforts related to use Traditional Self care Measures

Part (**IV**) Relationship between self care and Socio-demographic data

Part (V) Relationship between demographic data and knowledge about UTI

Part (VI) Relationship between daily habit and Urinary Tract Infection symptoms

Part (VII) Relation ship between Frequency of UTI and self care. .

Part (VIII) Relation ship between comment symptom OF Urinary Tract Infection and self care.

Part (I): Demographic Characteristic

Table (1): Distribution of pregnant women According to general Socio – demographic characteristic.

Item	No.	%	total
Age			
≤ 20 years	13	12.7	102
≥20 years	56	54.9	
≥ 30 years	33	32.4	
mean SD	27.81±5.7		
(min-max)	(18-42)		
Resident			
Rural	77	75.5	102
Urban	25	24.5	
Educational – level			
Illiterate	33	32,4	
Secondary	49	48	102
University	20	19,6	
Work			
Employee	29	28.4	102
Not employee	73	71.6	
Income			
Enough	29	28,4	102
Not enough	73	71,5	

The table (1) represents socio – demographic data of the studies group. This table shows that (54, 9%) of the total sample age ranged between 20-30 years, the mean age of the study sample was (27, 81+5.7(18-42). (48%) had moderate education while the minority (19, 6%) had high graduate.(75,5%) were from rural areas. On the other hand the majority of samples (71, 6) were not employed.

While the majority of sample income was in sufficient (71, 5%).

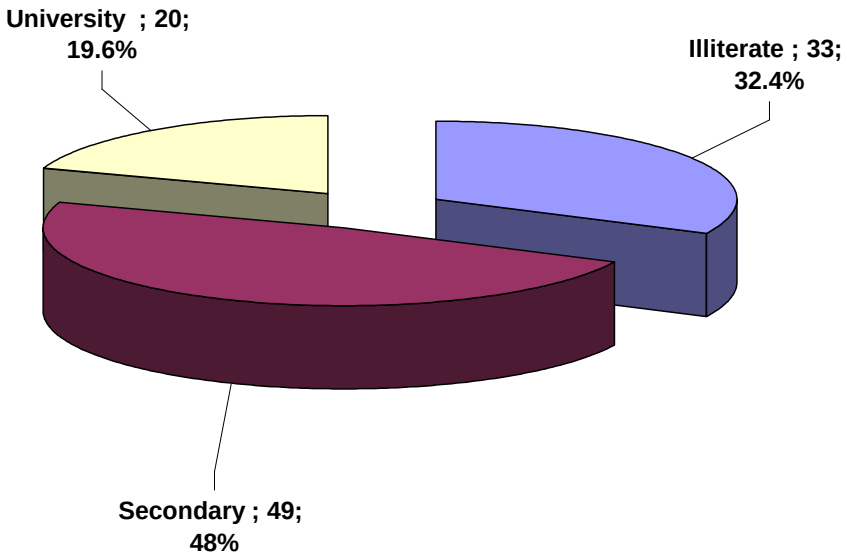


Figure (1): Distribution of pregnant women According to Socio – demographic (Education).

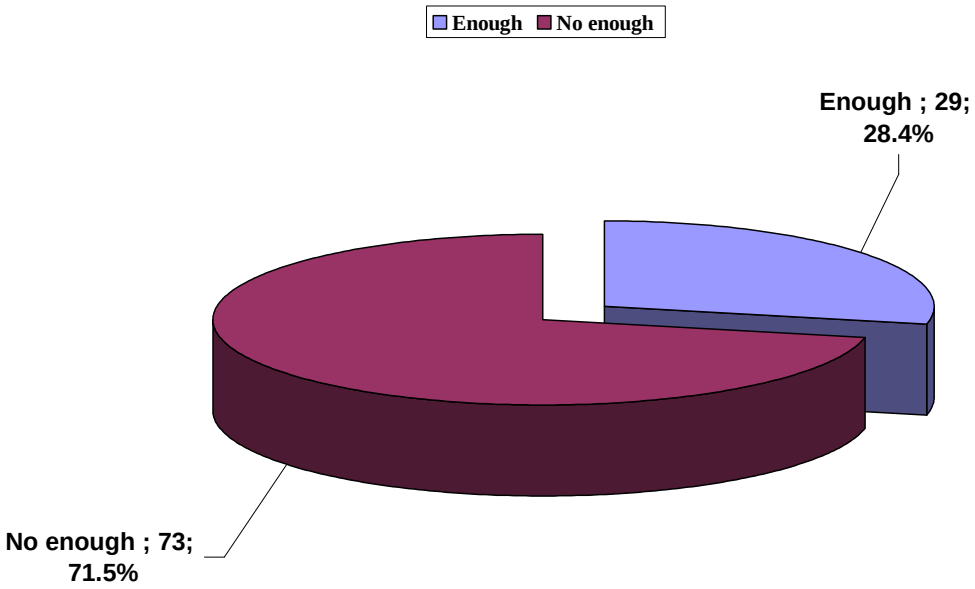


Figure (2): Distribution of pregnant women According to Socio – demographic (Income).

Table (2): Percentage Distribution of Pregnant According to Obstetric History.

Item	Range	Mean	
gravidity	1-7	**2.8** ± **1.4**	
Parity	0-4	1,7 ± 1,02	
Abortion	0-4	.,44 ± 0,15	
Living children	0-4	107 ± 1, 02	
Duration of present pregnancy(months)	3-9	6,4 ± 107	
Type of delivery	**Number**	**Percent %**	**total**
Normal	62	60,8	102
C.S	39	39,2	
Assisted delivery	1	1	
Uterine prolapse			102
Yes	26	25,5	
No	76	74,5	
Use of contraception			102
Yes	68	66,7	
No	34	33,3	
Hormonal	25	36,8	68
IUD	43	63,2	

These table illustrates information about pregnancy .Duration of current pregnancy (6, 4±1.7 3-9) months, gravidity (2, 8±1.4 1-7), Abortion number (O, 44±0, 51 0-7), parity (1, 7±1.02 0-4).

Also more than half of sample delivered normally (60, 8 %,).

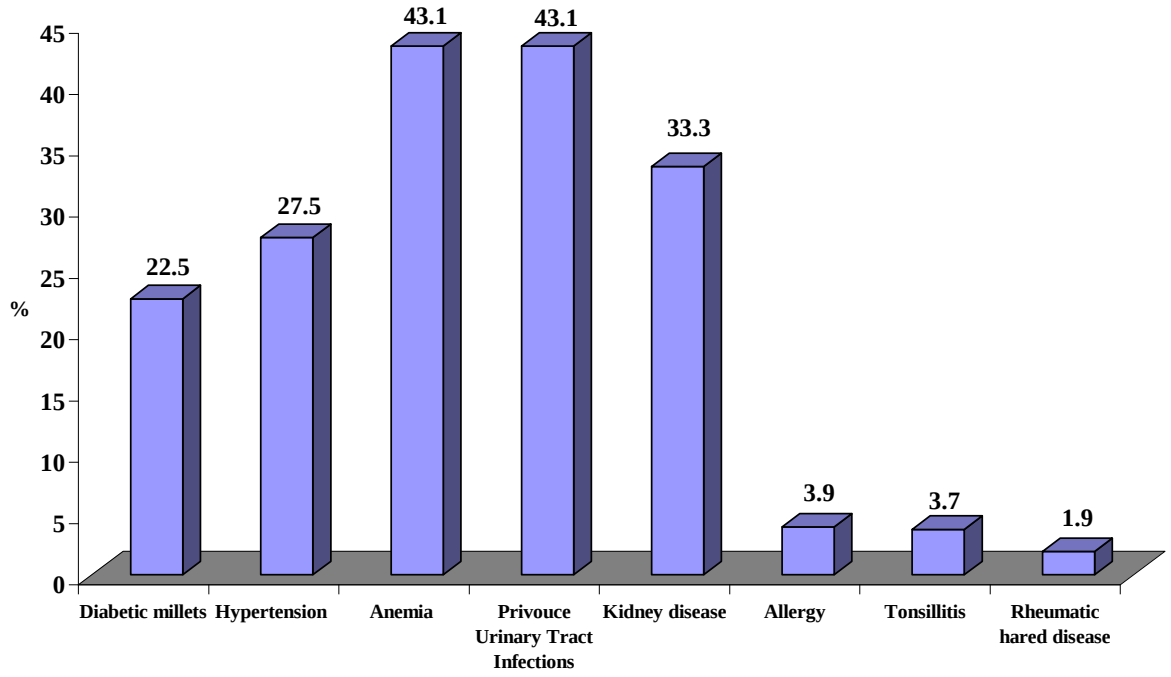
On the other hand the majority of sample, (66, 7%) used contraceptive methods included the IUD (63, 2) and (36, 8%) hormonal. (25, 5%) had genital prolapse.

Table (3): Distribution of pregnant women according to present medical history.

Medical history	No.	%
Yes	79	77.5%
No	23	22.5%
Medical disease		
Anemia	44	43.1%
Privouce Urinary Tract Infections	44	43,1%
Kidney disease	34	33.3%
Hypertension	28	27,5%
Diabetic millets	23	22,5%
Allergy	3	3.9%
Tonsillitis	6	3,7%
Rheumatic hared disease	2	1.9%

*** All items are not mutually exclusive**

The table show the (77, 5%) three fourth of sample had completed with medical problems, (43, 1%) had anemia and frequency UTIs, (33.3%) had kidney diseases, (27.5%) had hypertension and (22.5%) had diabetes milluets. While the minority (3.9%) had allergy and (1.9%) had rheumatic hared diseases.



*** All items are not mutually exclusive**

Figure (3): Distribution of pregnant women according to present medical history.

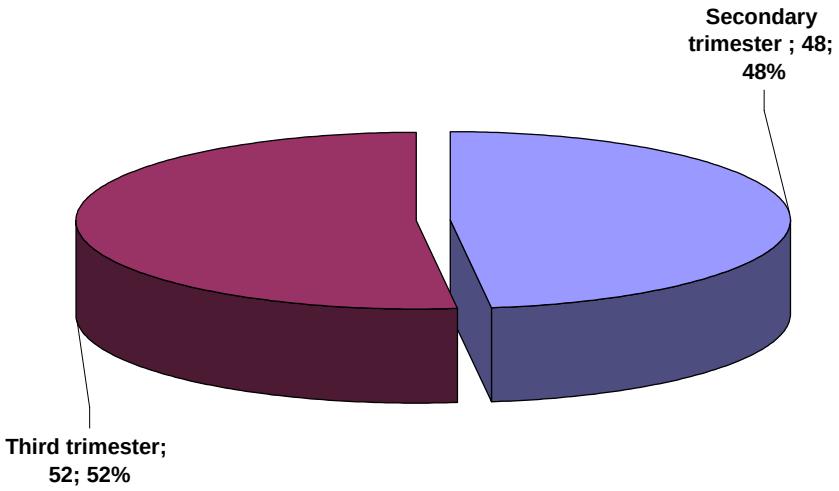


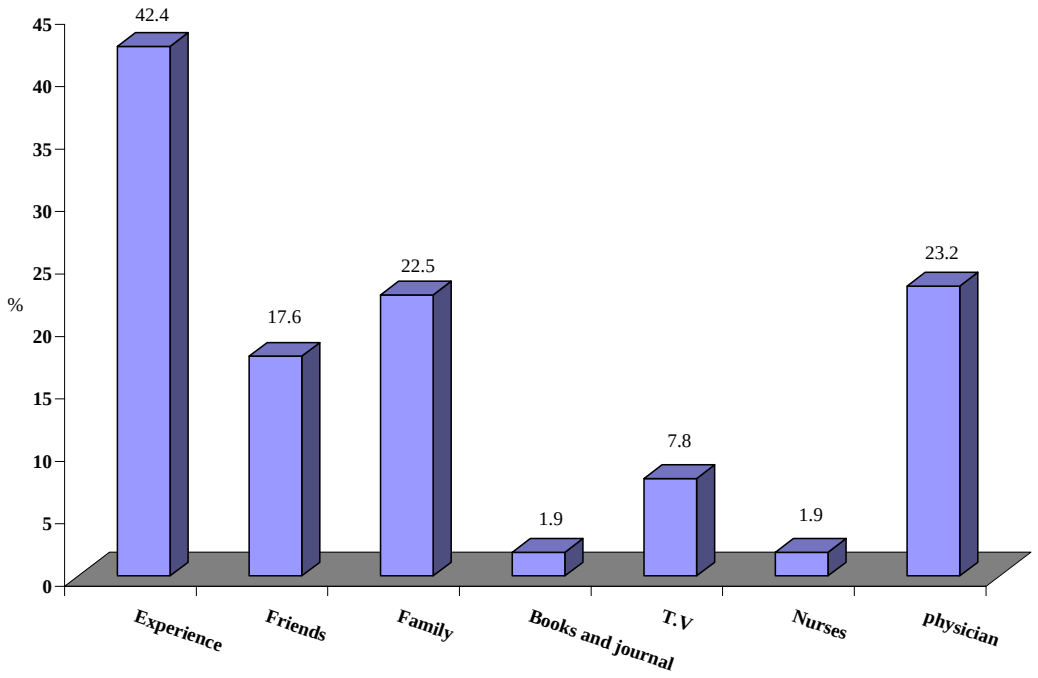
Figure (4): Distribution of pregnant women's according to stage of pregnancy.

Table (4): Distribution of pregnant women's according to personal daily habit.

Personal daily habit	N=102	
	No	**%**
Drink tea:		
No	22	21.6
Yes	80	78,4
Drink coffee:		
No	66	64.7
Yes	36	35,3
Drink home remedies:		
No	41	40.2
Yes	61	59,8
Smoking :		
No	69	67.6
Yes	33	32,4
Daily bath:		
No	10	9.8
Yes	92	90,2
Exercise:		
No	69	67,6
Yes	33	32,4
spicy food :		
No	28	27.5%
Yes	74	72,5
heavy food:		
No	29	28.4%
Yes	73	71,6

These table shows that the personal daily habits of studies groups (90,2%) less than total of sample taken complete bath, (72.5%) the two third of sample had spice food, followed by the (71.6%) of the sample had heavy food, (59.8%) had Drink home remedies drink such as mint, fenugreek, anise and cinnamon. It is also, show in the table the minority (32, 4%) had make exercise. It represent in walk and (9, 8) make kegal exercise.

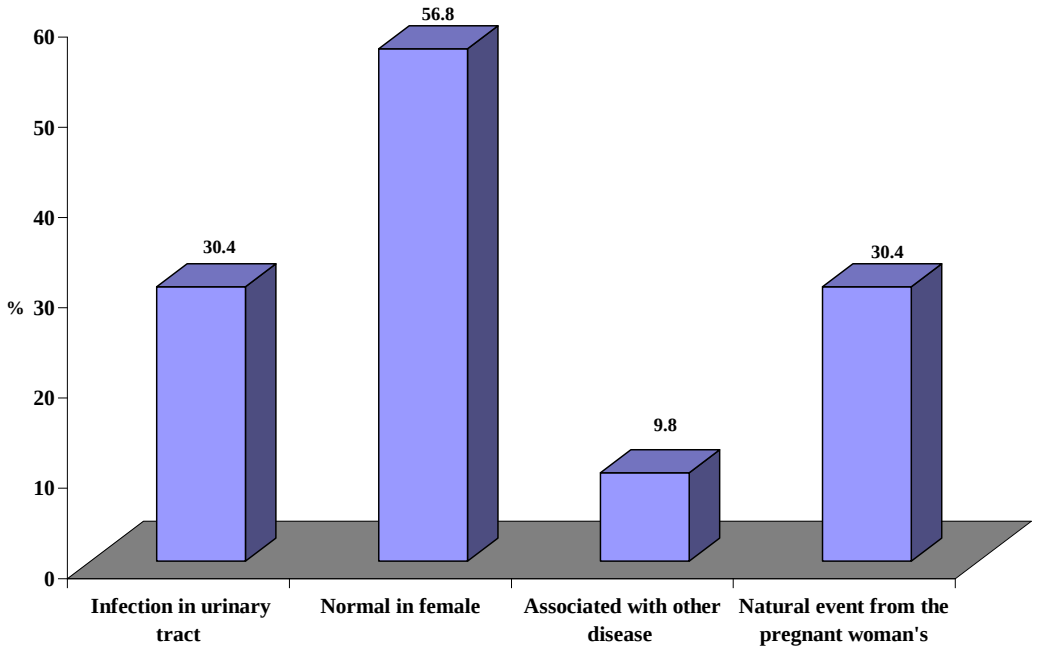
Part (II): pregnant women's knowledge about UTIs



*** All items are not mutually exclusive**

Figure (5): Percentage Distribution of pregnant women's according to sources of information as reported by pregnant women's.

These figure show that the majority of sample had (42, 4%) experience is the most source about UTI, followed by (23, 5%) by physician and (22.5%) by family **.**While the minority of sample (1.9%) from books**,** journal and nurses**.**



*** All items are not mutually exclusive**

Figure (6): Percentage Distribution of pregnant women's according to Means of Urinary Tract Infection as reported by pregnant women's.

These figure illustrates there was miss conception about the meaning of Urinary tract infection more than half of sample (56, 8%) the UTI normal in female followed by the minority of sample (9, 8%) the urinary tract infection associated with other disease**.**

Table (5): Distribution of knowledge to prevent UTI as reported by pregnant women's.

Item	No.	%
Personal cleanness	66	64.7
Make massage	62	60.8
Use of antiseptic solution	49	48
Increase fluid intake	44	43.1
Cold compresses	43	42.2
Doctor counseling	35	34,3
Take medication	31	30.4
Clothes must be cotton	27	26.5
Empty bladder after and before intercourse	15	16.6
Perineal care	9	8,8
Change of clothes especial under wear	9	8.8
Avoid vaginal douche	7	6,9
Worm massage	4	3,9

*** All items are not mutually exclusive**

This table show that the two third of the sample (64, 7%) heave personal hygiene followed by (60, 8) make massage and (48%) use of disinfection.

While the minority (8, 8%) of the sample use perineal care and (3, 9%) use worm massage.

Table (6): Distribution of UTI effects during pregnancy (mother) as reported by pregnant women's.

Does it affect pregnancy	NO	%	Total
No	64	62,7	102
Yes	**38**	**39,2**	
Abortion	17	42,5	
Preterm labor	12	30	
Bleeding	2	5,0	
Infection	5	12,5	
Low birth weight	1	5,0	
Pain in abdomen	1	5,0	

*** All items are not mutually exclusive**

This table shows that (62,7%) of the sample UTI doesn't affect the pregnancy. While (39.2%) of sample affect the pregnancy: include (42, 5) Causes abortion & (30%) causes preterm labor.

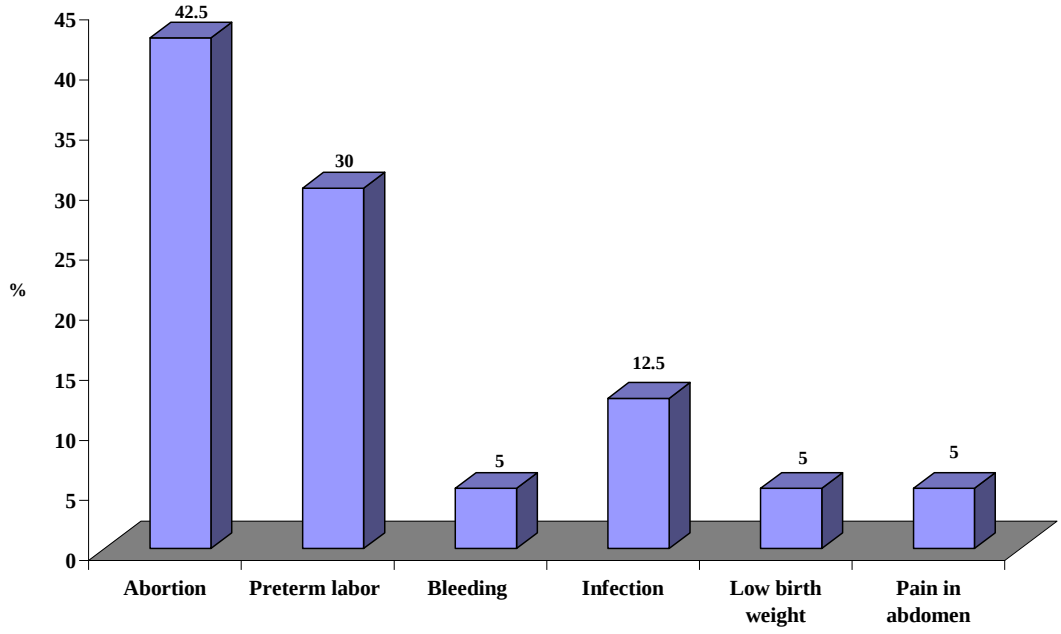


Figure (7): Distribution of UTI effects during pregnancy (mother) as reported by pregnant women's.

Table (7): Distribution of UTI effects during pregnancy (fetus) as reported by pregnant women's.

Does it affect Baby	No	%	Total
No	71	69,6	102
Yes	31	30,3	
Abortion	5	16	
Bleeding	1	3.3	
Low birth weight	8	26.7	
Infection	2	6,7	
Malformation	12	36,7	
Still birth	2	6,7	
Increase movement	1	1	

*** All items are not mutually exclusive**

This table shows that (69, 6%) of the sample UTI doesn't affect the futes. While (30, 3%) affect the futes: include (36, 7%) causes malformation.

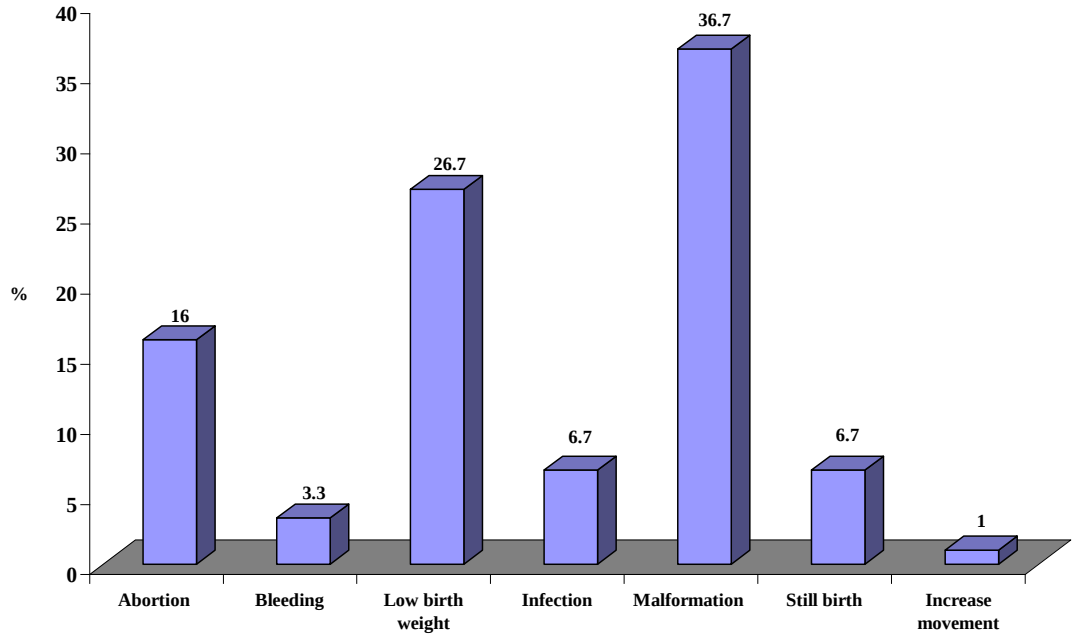


Figure (8): Distribution of UTI effects during pregnancy (mother) as reported by pregnant women's.

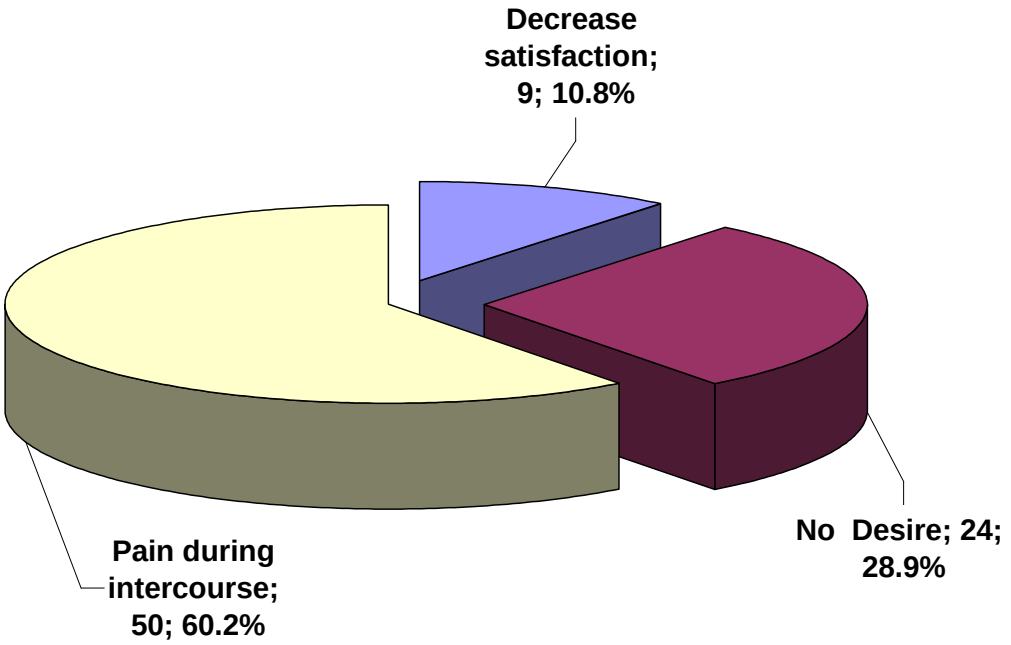


Figure (9): Distribution of UTI effects during pregnancy Sexual Relation as reported by pregnant women's.

Part (III): Assessment Self Care measures.

Table (8): Distribution of Signs and Symptoms of UTI as reported by pregnant women's.

Item	No.	%
Signs & symptoms		
• Pain during urination	**88**	**86**
• Pain during sexual intercourse	**83**	**81,4**
• Urgency	**83**	**81,4**
• Change of urine	**79**	**77,5**
• Discomfort of site bladder	**77**	**75**
• Burning sensation during urination	**77**	**75**
• Incontinence	**71**	**69,6**
• Pain in lower abdominal	**66**	**64,4**
• Sensation of Itching	**61**	**60,8**
• Fever-chill	**25**	**26,5**
• Fatigues	**25**	**26,5**
• Vaginal secretion	**8**	**7,8**
• Food edema	**2**	**1,9**
• Right side pain	**1**	**1**
• Light side pain	**1**	**1**

*** All items are not mutually exclusive**

These table show that (86%) have pain during urination, **(81, 4%)** pain during sexual and urgency, while the minority of the sample have (1, 9%) food edemas, (1%) pain in right and light side.

Table (9): Distribution of cases according to self care of U.T.I symptoms (voiding change) practiced by pregnant women.

Item	No.	%
○ **Self care for Urgency.**		
○ **Use anti septic**	**60**	**58.8**
○ **Perennial care**	**61**	**59.8**
○ **Complete Empty bladder**	**16**	**15.7**
○ **Frequency Change clothes**	**41**	**40.1**
○ **No thing**	**1**	**1**
• **Self care for pain in urination. dysuria**		
○ **Increase fluid**	**77**	**75.5**
○ **Use anti septic**	**60**	**58.8**
○ **Refer doctor**	**57**	**55.9**
○ **Take medication**	**23**	**22.5**
○ **No thing**	**1**	**1**
• **Self care for in countenance.**		
○ **Change clothes**	**59**	**57.8**
○ **Perennial care**	**34**	**33.3**
○ **Medication**	**36**	**35**
○ **Nothing**	**16**	**15.7**
• **Self care for burning sensation of urination.**	**66**	**64.7**
○ **Under wear most be cotton**	**41**	**40.1**
○ **Change clothes**	**61**	**59.8**
○ **Perennial care**	**3**	**2.9**
○ **medication**		
○ **Self care for Urine color change.**		
○ **urine analysis**	**79**	**77.5**
○ **increase fluid**	67	**65.5**
No thing	1	1

***all items are not mutually exclusive**

This table show that more half (57,8%) change the clothes in care of countenance,(64.7%)uses Under wear must be cotton in Self care for burning sensation of urination.

- While more than the third –fourth of the sample (75,5%)increase the fluid in self care for pain in urination, (77,5%)use urine analysis in self care for change the urine,(59.8%) use Perennial care in self care for urgency.

Table (10): Distribution of Cases according to self care of Other U.T.I symptoms.

Item	No.	%
• **Self care for fever**		
○ **Increase fluid**	**43**	**42.1**
○ **Cold compression**	**63**	**61.8**
○ **Refer doctor**	**35**	**34.3**
○ **take medication**	**35**	**34.3**
○ **No thing**	**23**	**22.5**
• **Self care for abdominal pain**		
○ **Massage in a abdominal**	**27**	**26.5**
○ **Take medication**	**48**	**47.1**
○ **No thing**	**41**	**40.2**
• **Self care for itching.**		
○ **Under wear most be cotton**	**66**	**64.7**
○ **Change clothes**	**41**	**40.1**
○ **Perennial care**	**61**	**59.8**
○ **medication**	**3**	**2.9**
• **Self care for pain in intercourse dyspareunia**		
○ **Use gel**	**27**	**26.5**
○ **Go to doctor**	**1**	**1**
○ **Empty bladder**	**30**	**29.4**
○ **No thing**	**41**	**40.2**
○ **Fatigues**		
○ **Take appropriate period of rest**	**78**	**76,4**
○ **Take compete bath**	**80**	**78.4**
○ **Drink worm fluid**	**63**	**61.7**

* All items are not mutually exclusive

This table show that more than half of the sample (61.8%)use the cold compression in self care for fever, (64.7%) use under wear most be cotton in itching,(76,5%) take a period of rest in fatigues,(47.1 %)Take medication in abdominal pain.

N.B: This table (9-10) answers the research question.

Table (11): Descriptive Data Analysis for Harmful Effects or Discomforts Related to Use traditional Self Care Measures to Relieve Dispareunia, dysuria.

Items	No=25	
	No	%
Traditional Self Care Measures To Relieve Dysuria and Dyspareunia, No. (25)		
Vaginal pain	7	5,4
Vaginal discharge	10	7,7
Itching	8	6,2

This table illustrates that the harmful effects or discomforts related to use traditional Self Care Measures to Relieve Dispareunia and disyuria (7,7%) vaginal discharge and (6,2%) itching.

N.B: This table answers the research question number (9).

Table (12): Distribution of pregnant women's according to Effects of Self Care on UTI symptoms.

Item	Disappear		Some What Disappear		Not Disappear	
	No.	%	No.	%	No.	%
Fever No-(66)	35	53.%	10	12.6%	21	30.6%
Lower abdominal pain No-(66)	25	37.8%	30	45.4%	11	16.6%
pain in urination (dysuria) No-(88)	53	59.%	25	28.4%	10	11.3%
burning sensation of urination No-(77)	40	51.9%	20	25.9%	17	22%
Urgency No-(83)	53	63.8	21	27.2	9	11.6
Incontinence No-(71)	41	59.1%	14	19.7%	16	22.5%
Dysparunia No – (83)	55	66.2%	20	24%	8	9.6%
Pain super pubic No-(77)	45	58.4%	24	31.1%	8	10.3%
itching sensation No-(61)	41	67.2%	18	29.2%	8	13.1%
Fatigue No-(83)	59	71%	14	16.8%	10	12%
Urine color change No-(79)	66	83.5%	10	22.6%	3	3.7%

*** All items are not mutually exclusive**

These table show that more tow third of the sample (83.5%) had complete disappear change of urine color, flowed by (71%) had fatigue complete disappear, (67.2%) had complete disappear itching sensation, and (66.2%) complete disappear dysparunia.

On the other hand the table show the less than half of sample (45.4%)some what disappear lower abdominal pain ,more than half of sample(28.4%)some what disappears pain in urination and (27.2%)some what disappear urgency.

N.B: This table answers the research question number (8).

Parte : IV

Table (13): Relation between self care and general Socio-demographic characteristic data.

		Correct(38)	Incorrect(64)	X2	P
Age		27.39 ± 5.73	28.06± 5.85	t=0.56	0.57
Education	Illiterate	19 57.5%	14 42.4%	30.4	<0.001***
	Secondary	5 10,2%	44 89.7%		
	University	14 70%	9 45%		
Work employee		9 23.7%	20 31.3%	0.67	0.41
Not employee		29 76.3%	44 68.8%		
Residence Urban		6 15.8%	19 29.7%	2.4	0.11
Rural		32 84.2%	45 70.3%		
Income Enough		19 65,5%	10 34,4%	9,91	<0,001***
Not enough		23 31,5%	50 68,4%		

P <0,001 highly significant

This table shows that highly significant (<0,001***) between self care and income and education. On other hand no significant different work, residence and age.

Part:V

Table (14): Relation between Knowledge and Socio-demographic data.

Item	Good		Average		Poor		X2	P
	No	**%**	**No**	**%**	**No**	**%**		
Age								
<20y	**6**	10.9	**1**	7.1	**6**	18,2		
20:25	**14**	25,5	**4**	28,6	**13**	39,4		
>25-30	**16**	**29.1**	**4**	28,6	**5**	15,2	**5.468[a]**	**.707**
>30-35	**13**	23,6	**3**	21,4	**4**	12,1		
>35	**6**	**10,9**	3	14,3	**6**	15,2		
Educational – level								
Illiterate	**13**	23,6	**4**	28,6	**3**	9,1	**3.561[a]**	**.469**
secondary	11	22.4	**16**	**32,**6	22	44.8		
University	**18**	32,7	**4**	28,6	**11**	33,3		
Not employee	**41**	74,5	**12**	**85,7**	**20**	**60,6**	**3.927[a]**	**.140**
employee	**14**	25,5	**2**	**14,3**	**13**	**39,4**		
Residence Rural	**42**	76.4	**10**	71,4	**25**	75,8	**.147[a]**	**.929**
Urban	**13**	23,6	**4**	28,6	**8**	24,2		
Income Enough	**21**	72,4	6	20.6	**2**	6,8	**12.12[a]**	**<0.002*** **
Not enough	**34**	46.5	**8**	10,2	**31**	42.4		

P <0,001 highly significant

This table show that highly significant (**<0.002*****) between income and knowledge While shows that no significant between knowledge and the age, education, worked and Residence.

Part: (VI)

Table (15): Relation ship between Daily Habits and Incontinence.

Item	Incontinence			
	No	%	X^2	P
Coffee	23	32,4	,9o2	,637
Tea	55	77,4	4,173	,124
Drink home remedies	44	62,0	,457	,499
Smoking	14	19,7	1,510	,470
Spicy food	15	21,1	4,692	<,030
Heavy food	13	18,3	11,762	<,001
Exercise	25	35,2	,994	,608
Daily bath	33	42,2	0.8	0,37

p<0.05 significant

These table show that highly significant (<, 001) between heavy food and incontinence fowled by (<, 03%) spicy food and incontinence

Table (16): Relation ship between Daily Habits and Abdominal Pain

Item	Abdominal Pain			
	No	%	X^2	P
Coffee	28	42,5	4,175	,124
Tea	51	77,3	3,075	,215
Drink home remedies	35	53,0	3,569	<,o59
Smoking	15	15,1	,832	,660
Spicy food	50	75,8	,967	,326
Heavy food	47	71,2	,012	,914
Exercise	22	33,3	,361	,835
Daily bath	74	82,22	6,5	<0,01

P <0,001 highly significant

p<0.05 significant

These table show that significant (<, 059%) between Drink home remedies between highly significant (<0, 01) between Daily bath between

Table (17): Relation ship between Daily Habits and Buring Sensation of Urination.

Item	Burin Sensation of Urination			
	No	%	X^2	P
Coffee	22	21,9	1,061	,588
Tea	51	77,5	,612	,737
Drink home remedies	38	58,5	,134	,714
Smoking	16	24,6	6,107	<,047
Spicy food	47	72,3	,005	,942
Heavy food	49	75.4	1,282	,257
Exercise	22	33,9	,252	,882
Daily bath	33	42,2	0.8	0.37

P <0.05 significant

These table show that significant (, 047%) between smoking and Burin Sensation of Urination.

Table (18): Relation ship between Frequency of UTI and self care.

	Correct		Incorrect		T test	p
	No.	%	No.	%		
Frequency of UTI	38	37,8	64	62,7	7,6	<0,006
Mean	1,3±0,9		3,4±1,8			

P <0,001 highly significant

These table show that highly significant (0,006) between the occurrence of Frequency of UTI and self care.

Table (19): Relation ship between symptom of UTI and self care.

Item	Incorrect	Correct	X^2	P
Urgency	55	16	21	<0.001***
	85.9%	42.1%		
Pain during intercourse	51	32	.322[a]	.571
	79.7%	84.2%		
Incontinence	46	25	.417[a]	.518
	71.9%	65.8%		
burning sensation of urination	42 %	23	.268[a]	.605
	65.6%	60.5%		

P <0,001 highly significant

This table shows that highly significant (<0.001**) between urgency and self care.