

## **Results**

The results of the study will be presented according to the following sequence:

- Part I.** Characteristics of the studied subjects tables 1.2
- Part II** Nurses Implementation of standards of quality management system: tables 3:9
- Part III.** Patients' satisfaction: tables10 :19 and figure1
- Part IV**
- Correlation coefficient between nurses implementation of standards of quality management system and personal characteristics : table 20
  
  - Correlation coefficient between patient' satisfaction, their age, number of the admission and hospitalization : table 21
  
  - Correlation coefficient between total scores of nurses' implementation standards of quality management system and total scores of patients' satisfaction: table 22

## Section I: -Characteristics of the studied subjects

**Table (1) Distribution of studied nurses according to their Socio demographic characteristics (n=40)**

Socio demographic characteristics	n= 40	
	No	%
<b>Age ( years)</b>		
20 < 30	4	10.0
30 < 40	28	70.0
≥ 40	8	20.0
<b>Mean ± SD</b>	27.98 ± 7.65	
<b>Units</b>		
Intensive care unit	14	35.0
Coronary care unit	17	42.5
Cardiothoracic care unit	9	22.5
<b>Qualification</b>		
Bachelor degree in nursing	9	22.5
Diploma +specialty degree in nursing	20	50.0
Associated diploma degree in nursing	1	2.5
Diploma degree in nursing	10	25.0
<b>Experience years at critical care units</b>		
1 < 3	4	10.0
3 < 6	21	52.5
≥ 6	15	37.5
<b>Martial status</b>		
Single	8	20.0
Married	31	77.5
Divorced	1	2.5
<b>Mean ± SD</b>	6.70 ± 3.60	

This table shows sthat distribution of studied nurses according to their socio demographic characteristics, the result revealed that the total study sample was 40 nurse,42.5% of them working in coronary care

unit,70.0% of studied nurses aged between 30 to less than 40 years with mean age ( $27.98 \pm 7.65$ ) as regarding to qualification, 50.0 % of studied nurses have diploma & specialty degree in nursing,52.5 % of studied nurses have experience from 4-to less than 6 years. Concerning to martial status 77.5% of studied nurses was married.

**(2) Distribution of the Studied Patients Sample According To Their  
Socio Demographic Characteristics (n= 160)**

Socio demographic characteristics	n= 160	
	No	%
<b>Units</b>		
Intensive care unit	66	41.2
Coronary care unit	47	29.4
Cardiothoracic care unit	47	29.4
<b>age</b>		
20 ≤ 40	66	25.6
40 ≤ 60	78	48.8
60 < 80	38	23.8
≥ 80	3	1.8
<b>Mean ± SD</b>	50.99 ± 12.94	
<b>Qualification</b>		
Illiterate	20	12.5
Read and write	65	40.6
Diploma degree	37	23.1
Bachelor degree	38	23.8
<b>Sex</b>		
Male	96	60.0
Female	64	40.0
<b>Number of the admissions</b>		
First admission	63	39.4
re admission	26	16.2
Recurrent admission	71	44.4
<b>Staying period (days)in hospital</b>		
<b>1-7</b>	62	38.7
<b>8-14</b>	87	54.4
<b>&gt; 14</b>	11	6.9
<b>Mean ± SD</b>	9.89 ± 8.01	

This table shows distribution of the studied patients sample according to their socio demographic characteristics, the result revealed that 60% of studied patient were males with age from 40 to less than 60 years,40.6 % of patient were read and write,41.2 %of patient receiving nursing care in Intensive care unit, as regarding to number of the current visit 44.4% of them recurrent visit, 54.4% of studied patient with stay period ranged from 8-to 14 days.

## Section II: -Nurses Implementation of Standards of Quality Management System

**Table (3) Mean Scores of Nurses Implementation of Standards of Nursing Care In the Studied Units (n=40)**

Items	Maximum Score	Intensive care unit n=14	Coronary care unit n=17	Cardiothoracic care unit n=9	F	P value
		Mean $\pm$ SD	Mean $\pm$ SD	Mean $\pm$ SD		
Nursing station	15	8.71 $\pm$ 1.38	9.17 $\pm$ 1.07	9.11 $\pm$ 2.62	0.336	>0.05
Nursing staff	18	12.93 $\pm$ 3.09	14.18 $\pm$ 2.98	15.00 $\pm$ 2.12	1.547	>0.05
Policies and procedures	12	6.86 $\pm$ 1.79	6.18 $\pm$ 1.59	6.44 $\pm$ 2.60	0.484	>0.05
Distribution of the work.	21	13.79 $\pm$ 3.19	15.47 $\pm$ 2.94	15.22 $\pm$ 5.31	0.881	>0.05
Continuing education training program	30	14.36 $\pm$ 4.55	6.94 $\pm$ 3.42	17.56 $\pm$ 4.72	2.140	>0.05
Nursing uniform	12	7.00 $\pm$ 1.88	7.76 $\pm$ 1.39	7.89 $\pm$ 1.69	1.116	>0.05
Total	108	63.64 $\pm$ 10.99	69.71 $\pm$ 8.99	71.22 $\pm$ 14.77	1.639	>0.05

This table clearly shows the mean scores of nurse's implementation standard of nursing care. The result revealed that there was no significant statistically difference in total & all items of nursing care standard. Nurses working in cardiothoracic care unit reported the highest mean score in relation to the total implementation of nursing care standard while nurses working in intensive care unit reported the lowest mean score in relation to the total implementation of nursing care standard.

**Table (4) Mean Scores of Nurses Implementation of Infection Control and Sterilization Standards in the Studied Units (N=40)**

Items	Maximum Score	Intensive care unit n=14	Coronary care unit n=17	Cardiothoracic care unit n=9	F	P value
		Mean $\pm$ SD	Mean $\pm$ SD	Mean $\pm$ SD		
Infection control committee	12	8.36 $\pm$ 4.03	8.71 $\pm$ 2.23	9.11 $\pm$ 1.54	0.188	>0.05
Policies and procedures	33	16.57 $\pm$ 4.07	16.82 $\pm$ 3.91	17.89 $\pm$ 4.78	0.293	>0.05
Critical care measures	9	5.14 $\pm$ 1.51	5.29 $\pm$ 2.20	7.44 $\pm$ 1.33	5.256	<0.05*
Infection control measures	6	3.86 $\pm$ 1.09	4.29 $\pm$ 1.53	5.33 $\pm$ 0.71	3.921	<0.05*
Policies and procedures	30	20.00 $\pm$ 5.99	22.59 $\pm$ 7.34	23.22 $\pm$ 3.46	0.963	>0.05
Total infection	54	30.07 $\pm$ 7.76	30.82 $\pm$ 6.45	34.44 $\pm$ 5.53	1.243	>0.05
Total sterilization	36	23.86 $\pm$ 6.81	26.88 $\pm$ 8.43	28.56 $\pm$ 4.03	1.331	>0.05

\*statistically significant  $P \leq 0.05$

This table clearly shows mean scores of nurses implementation of infection control and sterilization standards: the result revealed that there was no statistically significant difference among nurses in all items except for items of "critical care units " and item of "Infection control ". Nurses working in cardiothoracic care unit reported the highest mean score of total infection control and total sterilization standard while nurses working in Intensive care unit have the lowest mean score and respectively of total infection control and total sterilization standards.

**Table (5) Mean Scores of Nurses Implementation of Waste Disposal Standards in the Studied Units (N=40)**

Items	Maximum Score	Intensive care unit n=14	Coronary care unit n=17	Cardiothoracic care unit n=9	F	P value
		Mean ± SD	Mean ± SD	Mean ± SD		
Infectious wastes	21	14.36 ± 5.09	15.59 ± 5.57	17.33 ± 2.29	1.026	>0.05
Sharps waste	18	10.86 ± 3.76	11.47 ± 4.58	14.44 ± 2.61	2.460	>0.05
Pharmaceutical wastes	9	5.64 ± 2.31	5.82 ± 2.65	6.11 ± 2.32	0.099	>0.05
Radioactive wastes	12	7.07 ± 3.12	8.24 ± 3.17	7.44 ± 2.51	0.596	>0.05
Separation and circulation	12	7.00 ± 2.39	8.12 ± 2.64	8.11 ± 2.03	0.958	>0.05
Storage of waste	12	6.21 ± 2.19	6.82 ± 2.24	7.44 ± 2.29	0.845	>0.05
Safe disposal	21	10.71 ± 3.60	11.35 ± 4.65	13.11 ± 1.83	1.105	>0.05
Total	105	61.86 ± 18.86	67.41 ± 20.91	74.00 ± 12.61	1.169	>0.05

This table illustrates mean scores of nurses' implementation of waste disposal standards. The result revealed that there is no statistically significant difference among studied nurses in total & all items of nurses' implementation of waste disposal standards. Nurses working in the cardiothoracic care unit reported the highest mean score while, nurses working in Intensive care unit reported the lowest mean score in implementation of waste disposal standards.



**Table (6) Mean Scores of Nurses' Implementation of Kitchen Standards in the Studied Units (n=40)**

Items	Maximum Score	Intensive care unit n=14	Coronary care unit n=17	Cardiothoracic care unit n=9	F	P value
		Mean $\pm$ SD	Mean $\pm$ SD	Mean $\pm$ SD		
Policies	48	27.57 $\pm$ 6.90	25.12 $\pm$ 7.32	28.11 $\pm$ 9.43	0.600	>0.05
Work permit	18	9.50 $\pm$ 2.65	9.24 $\pm$ 2.82	10.33 $\pm$ 2.45	0.501	>0.05
Total	66	37.07 $\pm$ 7.97	34.35 $\pm$ 9.33	38.44 $\pm$ 11.50	0.644	>0.05

This table illustrates mean scores of nurses' implementation of kitchen standards in the studied units. The result revealed that there was no statistically significant difference among nurses in total & all items of nurse's implementation of kitchen standards. Nurses working in Cardiothoracic care unit reported the highest mean score while nurses working in coronary care unit have the lowest mean score in implementation of kitchen standards.

**Table (7) Mean Scores of Nurses' Implementation of Structures That Necessary for Nursing Care in the Studied Units (n=40)**

Items	Maximum Score	Intensive care unit n=14	Coronary care unit n=17	Cardiothoracic care unit n=9	F	P value
		Mean ± SD	Mean ± SD	Mean ± SD		
Preparation of nursing station	69	47.29 ± 6.83	50.12 ± 6.79	55.56 ± 3.71	4.785	<0.05*
Preparation of intensive care	33	23.14 ± 3.78	25.24 ± 2.84	28.22 ± 3.15	6.636	<0.001**
Preparation of burns	18	10.43 ± 2.24	9.24 ± 1.71	10.67 ± 2.50	1.877	>0.05
Total	120	80.85 ± 10.96	84.59 ± 9.33	94.44 ± 7.42	5.643	<0.001

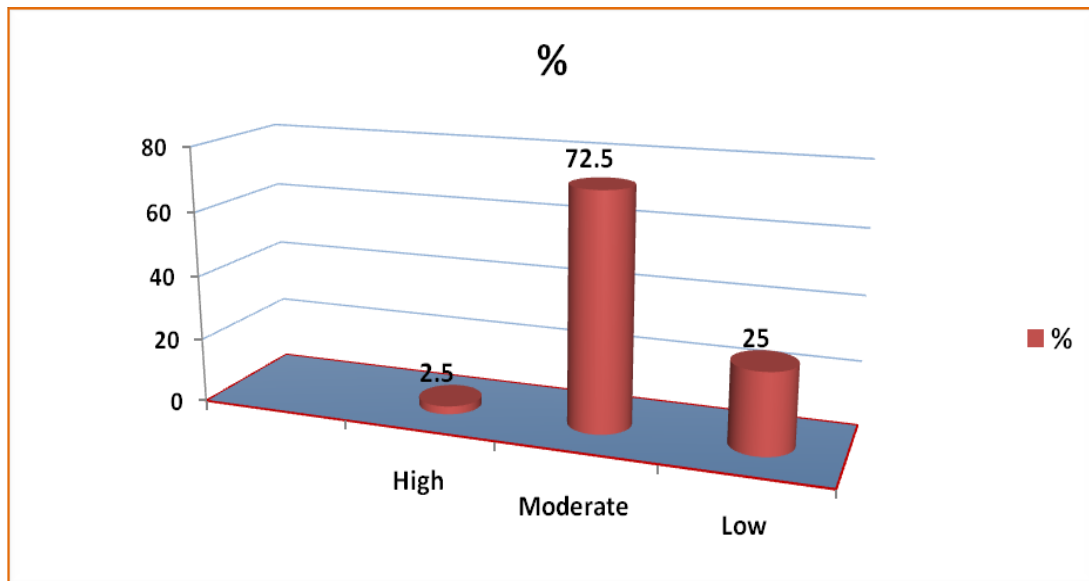
\*\*highly statistically significant  $P < 0.001$

This table clearly shows mean scores of nurses' implementation of standards that necessary for nursing care. The result revealed that there was statistically significant difference in total & all items. Except the item "Preparation of burns". Nurses working in cardiothoracic care unit reported the highest mean score. while nurses working in intensive care unit reported the lowest mean score in implementation of standards that necessary for nursing care.

**Table (8) Mean Scores of Nurses' Implementation Standards of Quality Management System in the Studied Units (n=40)**

Items	Maximum Score	Intensive care unit n=14	Coronary care unit n=17	Cardiothoracic care unit n=9	F	P value
		Mean ± SD	Mean ± SD	Mean ± SD		
Nursing intervention standard	108	63.64± 10.99	69.71± 8.99	71.22± 14.77	1.639	>0.05
Infection control standard	54	30.07±7.76	30.82± 6.45	34.44 ± 5.53	1.243	>0.05
Sterilization standard	36	23.86±6.81	26.88±8.43	28.56±4.03	1.331	>0.05
Waste disposal standard	105	61.86±18.86	67.41±20.90	74.00±12.61	1.169	>0.05
Landry standard	24	11.79±3.47	14.12±3.79	15.00±2.32	3.060	>0.05
Hygiene standard	39	21.64±5.15	20.94±3.94	22.22±4.02	0.262	>0.05
Kitchen standard	66	37.07±7.97	34.35±9.33	38.44±11.50	0.644	>0.05
Structures that necessary for nursing care	120	80.86±10.96	84.59±9.33	94.44±7.42	5.643	<0.001**
Total	552	330.79±53.89	348.82±55.45	378.44±50.26	2.149	>0.05

This table clearly shows mean scores of nurses' implementation standards of quality management system. The result revealed that there was no statistically significant difference between studied units in total & all items except for item of "Standards that necessary for implementing nursing care". Nurses working in Cardiothoracic care unit reported the highest mean score, while nurses working in Intensive care unit reported the lowest mean score in implementation of total standards of quality management system.



**Figure (1) Level of nurses' implementation of standards of quality management system**

This Figure illustrates the level of nurses' implementation of standards of quality management system. The result revealed that 72.5 % of studied nurses moderately implemented standards of quality management system

### Section III: Patients' Satisfaction

**Table (9) Distribution of the Patient' Satisfaction Regarding to Admission and Staying In The Studied Units (n=160)**

Admission and staying	units	Intensive care unit N=66		Coronary care unit N=47		Cardiothoracic care unit N=47		Total N=160		
		No	%	No	%	No	%	No	%	
1 - Speed and efficiency of the entry procedures and staying	bad	27	16.9	13	8.1	17	10.6	57	35.6	x <sup>2</sup> = 9.446  p<0.05
	acceptable	17	10.6	19	11.9	7	4.4	43	26.9	
	Good	22	13.8	15	9.4	23	14.4	60	37.5	
2 – preparing the room and bed during entering	bad	36	22.5	16	10.0	20	12.5	72	45.0	x <sup>2</sup> =11.788 p<0.05
	acceptable	12	7.5	18	11.3	7	4.4	37	23.1	
	Good	18	11.3	13	8.1	20	12.5	51	31.9	
3 –Cleaning the room	bad	26	16.3	11	6.9	16	10.0	53	33.1	x <sup>2</sup> =9.207 p<0.05
	acceptable	23	14.4	23	14.4	11	6.9	57	35.6	
	Good	17	10.6	13	8.1	20	12.5	50	31.3	
4- permission before entering the room	bad	20	12.5	15	9.4	18	11.3	53	33.1	x <sup>2</sup> =10.67 p<0.05
	acceptable	27	16.9	25	15.6	11	6.9	63	39.4	
	Good	19	11.9	7	4.4	18	11.3	44	27.5	
5- Silence the room and the units.	bad	16	10.0	13	8.1	14	8.8	43	26.9	x <sup>2</sup> = 1.85 p>0.05
	acceptable	34	21.3	24	15.0	19	11.9	77	48.1	
	Good	16	10.0	10	6.3	14	8.8	40	25.0	
6 – The service of telephone.	bad	27	16.9	12	7.5	20	12.5	59	36.9	x <sup>2</sup> =4.241 p>0.05
	acceptable	28	17.5	24	15.0	17	10.6	69	43.1	
	Good	11	6.9	11	6.3	10	6.3	32	20.0	
Fast in maintaining any drawbacks in the Room	bad	24	15.0	13	8.1	20	12.5	57	35.6	x <sup>2</sup> = 4.30 p>0.05
	acceptable	26	16.3	20	12.5	12	7.5	58	36.3	
	Good	16	10.0	14	8.8	15	9.4	45	28.1	
Cleaning the bathroom in the room	bad	18	11.3	12	7.5	17	10.6	47	29.4	x <sup>2</sup> = 2.94 p>0.05
	acceptable	36	22.5	23	14.4	19	11.9	78	48.8	
	Good	12	7.5	12	7.5	11	6.9	35	21.8	

This table clearly shows distribution of the patient' satisfaction regarding to admission and staying in the studied units. The result reveled that was statistically significant difference in item of "Speed and efficiency of the entry procedures and staying". 37.5% of patient reported good satisfaction, 14.5% of them in the cardiothoracic care unit.while 45.5 % of studied patient reported bad satisfaction in relation to item of " preparing the room and bed during entering." 22.5% of them in the Intensive care unit.additionally there was no statistically significant difference amonge studied units in relation to item of " Cleaning bathroom in the room"48.8% of studied patient reported acceptable satisfaction,22.5% of them in the Intensive care unit.

**Table (10) Distribution of the Patient' Satisfaction Regarding Food Services in the Studied Units (n=160)**

Food services	Units	Intensive care unit N=66		Coronary care unit N=47		Cardiothoracic care unit N=47		Total N=160		
		No	%	No	%	No	%	No	%	
The type of the food	bad	25	15.6	15	9.4	21	13.1	61	38.1	x <sup>2</sup> = 9.422 p<0.05
	acceptable	32	20.0	26	16.3	11	6.9	69	43.1	
	Good	9	5.6	6	3.8	15	9.4	30	18.8	
The Way of food	bad	28	17.5	14	8.8	16	10.0	58	36.3	x <sup>2</sup> = 5.652 p>0.05
	acceptable	30	18.8	27	16.9	20	12.5	77	48.1	
	Good	8	5.0	6	3.8	11	6.9	25	15.6	
Cafeterias services for you and your visitors.	bad	32	20.0	14	8.8	23	14.4	69	43.1	x <sup>2</sup> = 7.046 p>0.05
	acceptable	29	18.1	28	17.5	17	10.6	74	46.3	
	Good	5	3.1	5	3.1	7	4.4	17	10.6	

This table clearly shows distribution of the patient' satisfaction regarding food services in the studied units. The result revealed that was no statistically significant difference in total& all items of distribution of the patient' satisfaction according to food services except for item of "the type of the food"(P=<0.05) 43.1% of studied patient reported acceptable satisfaction,20.0% of them in the Intensive care unit,while 38.1% of studied patient reported bad satisfaction 15.6 % of them in the Intensive care unit.

**Table (11) Distribution of the Patient' Satisfaction according to Accounts in the Studied Units (n=160)**

Accounting	Units	Intensive care unit N=66		Coronary care unit 47		Cardiothoracic care unit N=47		Total N=160		
		No	%	No	%	No	%	No	%	
The financial affairs speed	bad	29	18.1	17	10.6	16	10.0	62	38.7	x <sup>2</sup> = 5.053 p>0.05
	acceptable	21	13.1	10	6.3	13	8.1	44	27.5	
	Good	16	10.0	20	12.5	18	11.3	54	33.8	
What you paid was suitable?	bad	26	16.3	17	10.6	15	9.4	58	36.3	x <sup>2</sup> = 6.831 p>0.05
	acceptable	24	15.0	9	5.6	14	8.8	47	29.4	
	Good	16	10.0	21	13.1	18	11.3	55	34.3	
You had a bill?	bad	27	16.9	16	10.0	14	8.8	57	35.6	x <sup>2</sup> = 4.281 p>0.05
	acceptable	19	11.9	9	5.6	13	8.1	41	25.6	
	Good	20	12.5	22	13.8	20	12.5	62	38.8	

This table clearly shows distribution of the patient' satisfaction according to accounts. The results revealed that there was no statistically significant difference among studied units in relation to total& all items of accounts, of the patient' satisfaction,38.8 % of the studied patient reported good satisfaction related to item of "you had a bill?"13.8% of them in coronary care unit ,while 38.7%of patient reported bad satisfaction related to item of "the financial affairs speed, " 18.1% of them in the Intensive care unit.



**Table (12) Distribution of the Patient' Satisfaction According To Physicians (n=160)**

Physicians	Units	Intensive care unit N=66		Coronary care unit N=47		Cardiothoracic care unit N=47		Total N=160		Test of significant
		No	%	No	%	No	%	No	%	
Does the doctor know your condition?	bad	6	3.8	3	1.9	2	1.3	11	6.9	x <sup>2</sup> = 4.057 P >0.05
	acceptable	5	3.1	6	3.8	9	5.6	20	12.5	
	Good	55	34.4	38	23.8	36	22.5	129	80.6	
The visit of the present doctor and examine your condition?	bad	6	3.8	3	1.9	4	2.5	13	8.1	x <sup>2</sup> = 0.559 P >0.05
	acceptable	5	3.1	5	3.1	4	2.5	14	8.8	
	Good	55	34.4	39	24.4	39	24.4	133	83.1	
The quick answer to your request	bad	10	6.3	3	1.9	3	1.9	16	10.0	x <sup>2</sup> = 3.390 p>0.05
	acceptable	11	6.9	9	5.6	8	5.0	28	17.5	
	Good	45	28.1	35	21.9	36	22.5	116	72.5	
Giving you enough time to talk and ask about your health condition?	bad	13	8.1	4	2.5	6	3.8	23	14.4	x <sup>2</sup> = 3.391 p>0.05
	acceptable	12	7.5	11	6.9	8	5.0	31	19.4	
	Good	41	25.6	32	20.0	33	20.6	106	66.3	
It was explained to you the purpose of giving medicine clearly?	bad	23	14.4	12	7.5	7	4.4	42	26.3	x <sup>2</sup> = 6.055 p>0.05
	acceptable	12	7.5	8	5.0	9	5.6	29	18.1	
	Good	31	19.4	27	16.9	31	19.4	89	55.6	

This table clearly shows distribution of the patient' satisfaction according to physicians .The results revealed that there was no statistically significant difference among studied units in relation to total& all items of the patient' satisfaction according to Physicians. 83.1%of the studied patient reported good satisfaction related to item of "The visit of the present doctor and examine your condition?".34.4% of them in the Intensive care unit , while 26.3% of the studied patient reported bad satisfaction related to item of "It was explained to you the purpose of giving medicine clearly? " 14.4% of them in the Intensive care unit .

**(13) Distribution of the Patient' Satisfaction Regarding Nursing Staff in the Studied Units (n=160)**

Nursing	Units	Intensive care unit N=66		Coronary care unit N=47		Cardiothoracic care unit N=47		Total N=160		
		No	%	No	%	No	%	No	%	
Giving the drug on time according to the doctor's orders	bad	7	4.4	5	3.1	7	4.4	19	11.9	x <sup>2</sup> = 1.020 p>0.05
	acceptable	13	8.1	11	6.9	11	6.9	35	21.9	
	Good	46	28.8	31	19.4	29	18.1	106	66.2	
Does the Nurse deal with you gently?	bad	23	14.4	9	5.6	14	8.8	46	28.8	x <sup>2</sup> = 11.235 p<0.05
	acceptable	29	18.1	29	18.1	15	9.4	73	45.6	
	Good	14	8.8	9	5.6	18	11.3	41	25.6	
Does the Nurse give you enough time to talk with you to help you solve your problem?	bad	26	16.3	8	5.0	14	8.8	48	30.0	x <sup>2</sup> = 11.473 p<0.05
	acceptable	21	13.1	24	15.0	12	7.5	57	35.6	
	Good	19	11.9	15	9.4	21	13.1	55	34.4	
The nurses ability to answer your questions about you health condition	bad	24	15.0	9	5.6	12	7.5	45	28.1	x <sup>2</sup> = 5.990 p>0.05
	acceptable	23	14.4	23	14.4	16	10.0	62	38.8	
	Good	19	11.9	15	9.6	19	11.9	53	33.1	
The nurses do their work silently so as not to disturb patients.	bad	16	10.0	10	6.3	12	7.5	38	23.8	x <sup>2</sup> = 4.364 p>0.05
	acceptable	32	20.0	18	11.3	15	9.4	65	40.6	
	Good	18	11.3	19	11.9	20	12.5	57	35.6	
The nurse explains what she is going to do.	bad	17	10.6	12	7.5	11	6.9	40	25.0	x <sup>2</sup> = 6.580 p>0.05
	acceptable	26	16.3	9	5.6	17	10.6	52	32.5	
	Good	23	14.4	26	16.3	19	11.9	68	42.5	
The nurses Efficiency in the nursing procedures.	bad	13	8.1	7	4.4	12	7.5	32	20.0	x <sup>2</sup> = 4.643 p>0.05
	acceptable	21	13.1	10	6.3	9	5.6	40	25.0	
	Good	32	20.0	30	18.8	26	16.3	88	55.0	

This table clearly shows distribution of the patient' satisfaction according to nursing. The results revealed that was no statistically significant difference among studied units in relation to total& all items of the patient' satisfaction according to nursing except for item of "does the Nurse deal with you gently and item of "does the nurse give you enough time to talk with you to help you solve your problem?", 45.6% of the studied patient reported acceptable satisfaction, 18.1 % of them in Intensive care unit equal with 18.1% in coronary care unit, while 25.6% of the studied patient reported good satisfaction, 11.3% of them in the cardiothoracic care unit. 66.2% of the studied patient reported good satisfaction, regarding to nursing. 28.8% of them in Intensive care unit in relation to item "giving the drug on time according to the doctor's orders".

**Table (14) Distribution of the Patient' Satisfaction Regarding Way Who Dealt With Them during Stay Hospitalization (n=160)**

-evaluation method of clerks	Units A	Intensive care unit N=66		Coronary care unit N=47		Cardiothoracic care unit N=47		Total N=160		Test of significant
		No	%	No	%	No	%	No	%	
The receptionist	bad	20	12.5	11	6.9	20	12.5	51	31.9	x <sup>2</sup> =10.100 p<0.05
	acceptable	37	23.1	25	15.6	14	8.8	76	47.5	
	Good	9	5.6	11	6.9	13	8.1	33	20.6	
The employee of entering	bad	28	17.5	13	8.1	19	11.9	60	37.5	x <sup>2</sup> =11.799 p<0.05
	acceptable	30	18.8	26	16.3	13	8.1	69	43.1	
	Good	8	5.0	8	5.0	15	9.4	31	19.4	
The accountant	bad	25	15.6	14	8.8	19	11.9	58	36.3	x <sup>2</sup> =3.501 p>0.05
	acceptable	33	20.6	25	15.6	18	11.3	76	47.4	
	Good	8	5.0	8	5.0	10	6.3	26	16.3	
X-ray technician	bad	16	10.0	13	8.1	17	10.6	46	28.8	x <sup>2</sup> =2.091 p>0.05
	acceptable	35	21.9	25	15.6	21	13.1	81	50.6	
	Good	15	9.4	9	5.6	9	5.6	33	20.6	
Laboratory technician	bad	17	10.6	13	8.1	21	13.1	51	31.9	x <sup>2</sup> =5.559 p>0.05
	acceptable	36	22.5	24	15.0	17	10.6	77	48.1	
	Good	13	8.1	10	6.3	9	5.6	32	20.0	
Security officer	bad	42	26.3	20	12.5	24	15.0	86	53.8	x <sup>2</sup> =7.612 p>0.05
	acceptable	11	6.9	18	11.3	15	9.6	44	27.5	
	Good	13	8.1	9	5.6	8	5.0	30	18.8	
The Cleaner worker	bad	36	22.5	18	11.3	29	18.1	83	51.9	x <sup>2</sup> =7.008 p>0.05
	acceptable	21	13.1	16	10.0	11	6.9	48	30.0	
	Good	9	5.6	13	8.1	7	4.4	29	18.1	
The elevator worker /the lift man	bad	46	28.8	24	15.0	26	16.3	96	60.0	x <sup>2</sup> =4.853 p>0.05
	acceptable	14	8.8	15	9.4	13	8.1	42	26.2	
	Good	6	3.8	8	5.0	8	5.0	22	13.8	
The Transport worker	bad	33	20.6	17	10.6	30	18.8	80	50.0	x <sup>2</sup> =10.141 p<0.05
	acceptable	22	13.8	22	13.8	8	5.0	52	32.5	
	Good	11	6.9	8	5.0	9	5.6	28	17.5	

This table clearly shows distribution of the patient' satisfaction regarding evaluation method of clerks ' way who dealt with them during stay in hospitalization. The results revealed that was statistically significant difference among studied units in relation to in items of the "receptionist", item of "the employee of entering" and item of "the transport worker" 60.0% of the studied patient reported bad satisfaction, in relation to item of the elevator worker 28.8% of them in Intensive care unit.

**Table (15) Distribution of the Patient' Satisfaction Regarding A General Evaluation in the Studied Units (n=160)**

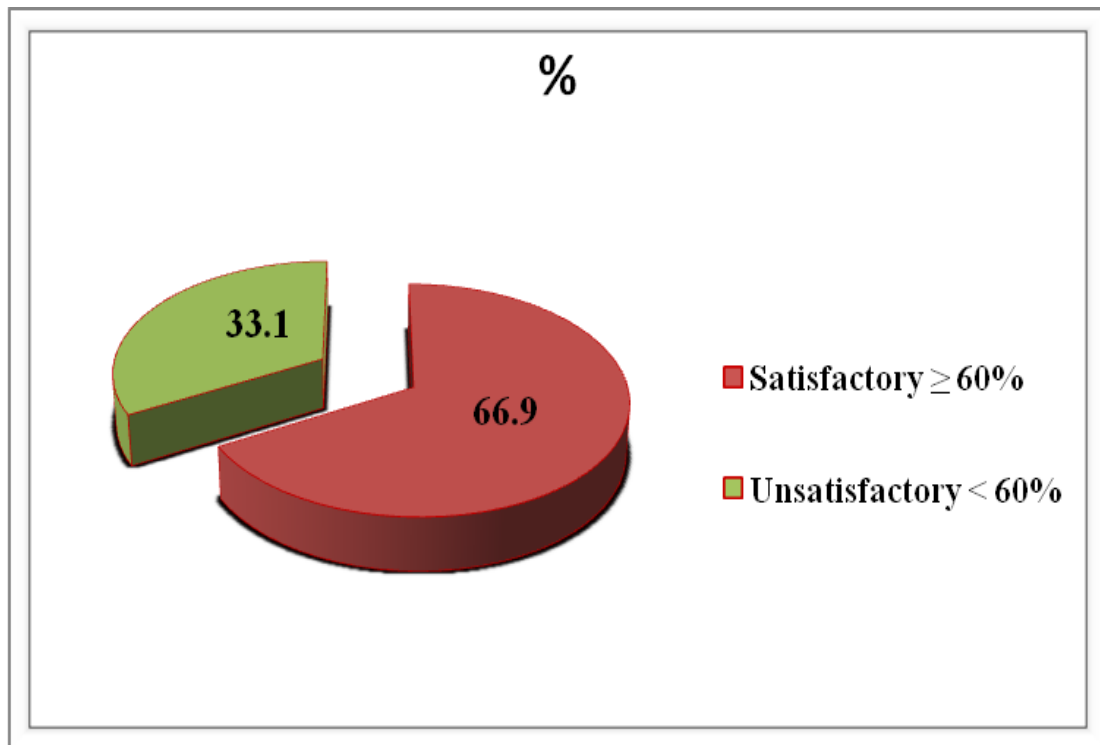
A general evaluation	Units level	Intensive care unit N=66		Coronary care unit N=47		Cardiothoracic care unit N=47		Total N=160		Test of significant
		No	%	No	%	No	%	No	%	
the due information was shown to you and your agreement was taken before doing any procedures clearly	bad	27	16.9	25	15.6	20	12.5	72	45.0	x <sup>2</sup> = 2.255 p>0.05
	acceptable	17	10.6	10	6.3	10	6.3	37	23.1	
	Good	22	13.8	12	7.5	17	10.6	51	31.9	
Your rights and responsibilities were explained to you clearly	bad	63	39.4	43	26.9	47	29.4	153	95.6	x <sup>2</sup> = 4.076 p>0.05
	acceptable	3	1.9	4	2.5	0	0	7	4.4	
	Good	0	0	0	0	0	0	0	0	
your health improved because of services provided to you in the hospital.	bad	17	10.6	11	6.9	14	8.8	42	26.3	x <sup>2</sup> = 2.194 p>0.05
	acceptable	28	17.5	19	11.9	14	8.8	61	38.1	
	Good	21	13.1	17	10.6	19	11.9	57	35.6	
The possibility that you recommend the others from the services	bad	29	18.1	8	5.0	15	9.4	52	32.5	x <sup>2</sup> =12.9 85 P<0.05
	acceptable	25	15.6	29	18.1	17	10.6	71	44.4	
	Good	12	7.5	10	6.3	15	9.4	37	23.1	
The speed of the laboratory in giving results	bad	22	13.8	11	6.9	14	8.8	47	29.4	x <sup>2</sup> = 9.398 P<0.05
	acceptable	34	21.3	30	18.8	18	11.3	82	51.3	
	Good	10	6.3	6	3.8	15	9.4	31	19.4	
The X-ray units 'accuracy in dates.	bad	18	11.3	11	6.9	14	8.8	43	26.9	x <sup>2</sup> = 10.661 P<0.05
	acceptable	26	16.3	31	19.4	20	12.5	77	48.1	
	Good	22	13.8	5	3.1	13	8.1	40	25.0	

This table clearly shows distribution of the patient' satisfaction regarding a general evaluation among studied units. the results revealed that there was statistically significant difference in relation to item of "the speed of the laboratory in giving results ",51.3% of studied patient reported acceptable satisfaction 21.3%of them in Coronary care unit, item of" the possibility that you recommend the others to benefit from the services of this hospital."44.4% of studied patient reported acceptable satisfaction,18.1% of them in Coronary care unit.and item of" the X-ray units 'accuracy in dates., 48.1% of studied patient reported acceptable satisfaction19.4% of them in Coronary care unit .

**Table (16) Mean Scores of Components of the Patient' Satisfaction in Studied Units (n=160)**

Items of satisfaction Unit	Maximum Score	Intensive care unit n= 66	Coronary care unit n=47	Cardiothoracic care unit n=47	F	P
		Mean $\pm$ SD	Mean $\pm$ SD	Mean $\pm$ SD		
Admission and staying	24	15.05 $\pm$ 4.34	15.77 $\pm$ 5.87	15.79 $\pm$ 4.84	0.419	> 0.05
Food services	9	5.05 $\pm$ 1.85	5.34 $\pm$ 2.17	5.48 $\pm$ 1.68	0.685	> 0.05
Accounts	9	5.55 $\pm$ 2.29	6.23 $\pm$ 2.37	6.28 $\pm$ 2.61	1.681	> 0.05
Physicians	15	12.56 $\pm$ 2.96	13.26 $\pm$ 2.71	13.11 $\pm$ 2.76	0.964	> 0.05
Nursing	21	14.68 $\pm$ 4.18	15.49 $\pm$ 4.58	15.81 $\pm$ 4.16	1.047	> 0.05
Evaluating the clerks' way who dealt with them during your stay in hospital	27	15.56 $\pm$ 5.16	15.51 $\pm$ 5.82	16.74 $\pm$ 5.77	0.786	> 0.05
A general evaluation	18	10.65 $\pm$ 2.94	11.04 $\pm$ 3.53	10.74 $\pm$ 2.94	0.224	> 0.05
Total	123	78.94 $\pm$ 18.54	82.64 $\pm$ 22.88	83.91 $\pm$ 20.51	0.916	> 0.05

This table clearly shows mean scores of components of the patient' satisfaction the result revealed that there was no statistically significant difference in relation to total& all items of the patient' satisfaction, Nurses working in cardiothoracic care unit reported the highest mean score in relation to total of components of the patient' satisfaction, while nurses working in intensive care unit reported the lowest mean score .



$\chi^2 = 18.225$

P value  $< 0.001$

**Figure (1) Level of patients' satisfaction**

This Figure shows level of patients' satisfaction. The result revealed that 66.9% of studied patients were satisfactory, while 33.1% of studied patients unsatisfactory.

**Table (17) Relation between Total Scores of Nurses' Implementation of Standards of Quality Management System and Total Scores of Patients' Satisfaction (n=160)**

Standards of quality management system score	Maximum score	Patients' satisfaction score		t	p value
		Satisfactory	Unsatisfactory		
		Mean $\pm$ SD	Mean $\pm$ SD		
Nursing intervention standard	108	68.30 $\pm$ 12.14	67.41 $\pm$ 10.50	0.243	>0.05
Infection control standard	54	31.91 $\pm$ 7.01	30.65 $\pm$ 6.67	0.576	>0.05
Sterilization standard	36	26.78 $\pm$ 6.71	25.41 $\pm$ 7.89	0.593	>0.05
Waste disposal standard	105	70.17 $\pm$ 16.65	62.59 $\pm$ 20.97	1.275	>0.05
Landry standard	24	14.26 $\pm$ 3.47	12.53 $\pm$ 3.59	1.538	>0.05
Hygiene standard	39	22.65 $\pm$ 4.00	19.88 $\pm$ 4.37	2.080	<0.05
foods standard	66	39.00 $\pm$ 8.66	32.47 $\pm$ 9.09	2.308	<0.05
Structures that necessary for nursing care	120	87.17 $\pm$ 6.83	83.24 $\pm$ 14.26	1.160	>0.05
Total	552	360.26 $\pm$ 48.88	334.18 $\pm$ 61.44	1.496	>0.05

This table clearly shows the relation between total scores of nurse's implementation of standards of quality management system scores and total of patients' satisfaction. the result revealed that there was no statistically significant relation between the total &all items of nurse's implementation of standards of quality management system scores and total of patients' satisfaction, except the item of" Hygiene standard"(t=2.080 P<0.05),and the item"kitchen standard"(t=2.308 P<0.05). satisfactory patient reported the highest mean score.



## Part IV: Correlation Coefficient between Nurses' Implementation of Standards of Quality Management System and Personal Characteristics

**Table (18) Correlation Coefficient between Nurses' Implementation of Standards of Quality Management System, Their Age and Years of Experience**

Variables	n=40	
	Nurses implementation of standards of quality management system standards	
	r	p
Age	0.108	> 0.05
Years of experience	0.308	> 0.05

This table clearly shows the correlation coefficient between nurses' implementation of standards of quality management system, their age and years of experience. The result showed that there was no statistically significant correlation between nurses' implementation of standards of quality management system, age and years of experience.

**Table (19) Correlation coefficient between patient' satisfaction, their age, number of the admission and Hospitalization**

Variables	n=160	
	Patients' satisfaction score	
	r	p
Age	0.088	> 0.05
Number of the admission	0.390	< 0.001**
Hospitalization	-0.050	> 0.05

\*\*

This table clearly shows the correlation coefficient between patient' satisfaction, their age, number of the admission and hospitalization. The result showed that there was statistically significant correlation between number of the current visit & patient' satisfaction .

**Table (20) Correlation coefficient between total scores of nurses' implementation standards of quality management system and total scores of patients' satisfaction**

Standards of quality management system score	Patients' satisfaction score	
	r	p
Nursing intervention standard	0.018	> 0.05
Infection control standard	0.129	> 0.05
Sterilization standard	0.113	> 0.05
Waste disposal standard	0.214	> 0.05
Landry standard	0.266	> 0.05
Hygiene standard	0.333	< 0.05*
food standard	0.305	> 0.05
Structures that necessary for nursing care	0.338	< 0.05*
Total	0.266	> 0.05

\*

This table clearly shows correlation coefficient between total scores of nurses' implementation of standards of quality management system and total scores of patients' satisfaction. The result shows there was no statistically significant correlation, except for the items of "Hygiene standard" and the item of "Standards that necessary for nursing care".