Results

Presentation and Analysis of Data

The results of the current study are classified into the following tool:

First tool:

This tool consists of the following parts:

Part (A):

- Demographic data for studied patients (table, 1).
- Medical history of the patients with chronic renal failure (table, 2, 3).
- Assess the knowledge of patients about chronic renal failure and hemodialysis (table, 4) and (figure, 1).

Part (B):

- Assess level of self management activities for the studied patients (table, 5) and (figure, 2).
- Assess the factors affecting on self management activities for the patients under hemodialysis including physical, social and psychological factors (table, 6, 7, 8).
- Assess self efficacy level for the patients with ESRF (table, 9) and (figure, 3).

* Relationships between variables of the study (table, 10, 11, 12, 13, 14).

Tool (1), Part (a)

Table (1): Distribution of demographic characteristics of study patients (n=100).

Socio demographic data	Female (n = 42)		Male (n= 58)		X^2	P value
	No.	%	No.	%		
Age (Year):						
* 20 < 30	8	19.048	11	18.966	3.770	> 0.05*
* 30 < 40	18	42.857	22	37.931		
* 40 < 50	14	33.333	15	25.862		
* > 50	2	4.762	10	17.241		
Mean-STD=40-83 +- 10.03						
Educational level:						
* Illiterate	4	9.524	12	20.690	2.615	> 0.05
* Primary education	10	23.810	10	17.241		
* High school	19	45.238	23	39.655		
* University	9	21.428	13	22.414		
Occupational status:						
* Work	26	61.906	30	51.724	1.822	> 0.05
* Not work	16	38.095	28	48.276		
Marital status:						
* Married	36	85.714	43	74.138	4.437	> 0.05
* Divorced	1	2.381	0	0.000		
* Widow	0	0.000	1	1.724		
* Single	5	11.905	14	24.138		
Residence:						
* Rural	23	54.762	33	56.897	0.045	> 0.05
* Urban	19	45.238	25	43.103		

* p>0.05 no statistically significant

Table (1), it was noticed that there was homogeneity among studied sample regarding age, educational level, occupation, marital status and residence. Concerning age, around two fifths (42.9% and 37.9%) of female and male respectively were recorded within age group of 30 < 40 years. With respect of marital status, the most (85.7% and 74.1%) of studied patients for female and male respectively were married. As well as residence, more than half of female and male patients (54.8% and56.9%) respectively were lived in rural areas.

Table (2): Percent (%) distribution of patients under study according to their medical history of the disease (n=100).

Post disease history	Female (n = 42)		Male (n= 58)		X^2	P value
	No.	%	No.	%		
Time of begging HD:						
* 0-5 years	21	50.000	28	48.276	10.26	> 0.05*
* 6-10 years	14	33.333	25	43.103		
* 11-15 years	7	16.667	5	8.621		
Number of session:						
* 1-2	0	0.000	0	0.000	-	-
* 3	42	100.000	58	100.000		
* More than 3	0	0.000	0	0.000		
Chronic diseases:						
* No	25	59.524	28	48.276	4.90	> 0.05
* Diabetes	3	7.143	7	12.069		
* Hyper tension	12	28.571	16	27.586		
* Heart disease	2	4.762	2	3.448		
* Liver disease	0	0.000	5	8.621		

* $p>0.05$ no statistically significant

As shown in table (2), there was hemoginisity among studied sample regarding time of beginning HD, number of sessions and suffering from other chronic diseases. It was illustrated that around half (50% and 48.3%) of female and male patients were beginning HD within 0-5 years, respectively. In addition that all studied group (100%) had three times per week for HD and half of males and females subjects had not other chronic diseases.

Table (3): Percentage (%) distribution of study group related to complication during session (n=100).

Complications	Yes	No
	%	%
* Hypotension	74	26
* Nausea & vomiting	53	47
* Muscle cramps	58	42
* Headache	47	53
* Chest pain	43	57
* Back pain	32	67
* Itching	24	76
* Fever	32	68
* Dyspnea	24	76
* Abdominal pain	38	62
* Anorexia	56	44

Table (3) illustrates that the majority of studied patients (74%) were complained from hypotension, while the minority of them (24%, 24%, 32%, 32% and 38%) were complained from dyspnea, itching, fever, back pain and abdominal pain respectively.

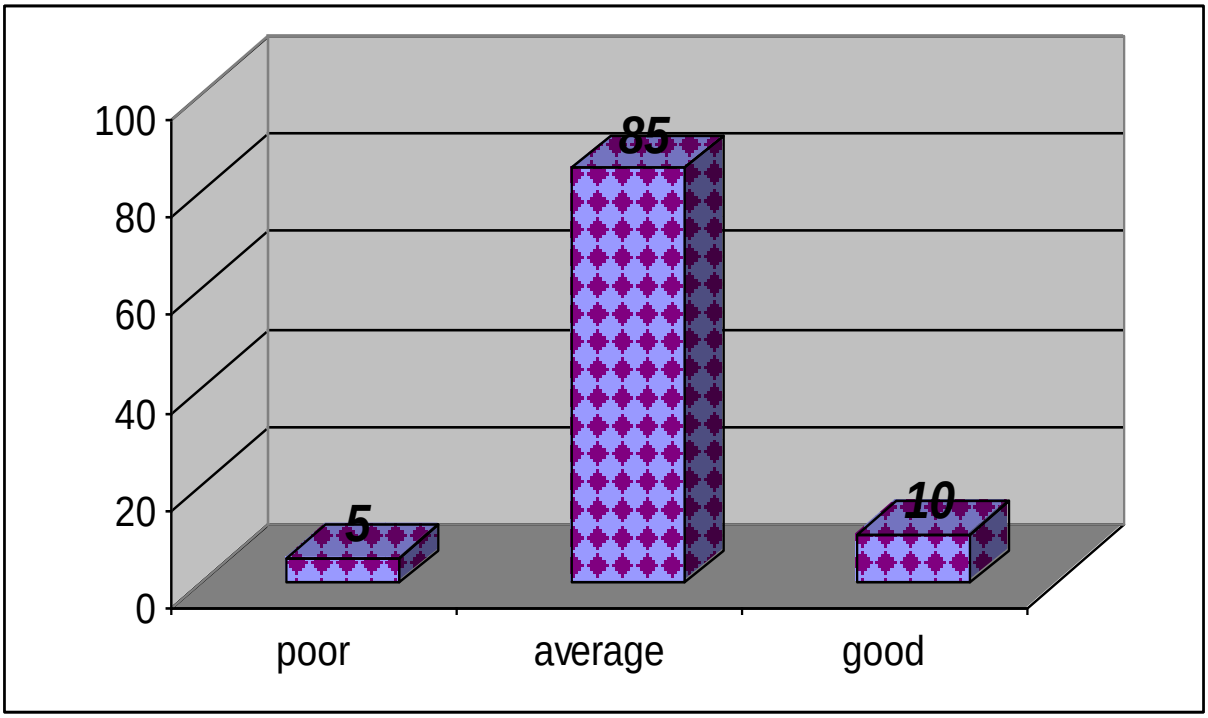
Table (4): Percentage (%) distribution for patients' knowledge related to CRF and HD* (n=100).

Knowledge	poor	average	good
	%	%	%
- Definition	12	64	24
- Causes	47	31	22
- Signs	2	32	66
- Complication of CRF	69	31	0
- Methods of treatment	0	88	12
- Dialysis	0	31	69
- Complication of dialysis	0	26	74

* - CRF = chronic renal failure
- HD =hemodialysis

This table (4) summarizes the degree of knowledge about CRF and HD among studied sample. It was noticed that the majority of the studied patients (88%) had average knowledge about the method of treatment, while the most of them (74%) had good knowledge about the complications of dialysis.

Figure (1): Distribution of patients' total knowledge score regarding CRF and HD* (n=100).



*** - CRF = chronic renal failure**

- HD = hemodialysis

Fig. (1) Illustrates that the most (85 %) of the studied patients had average level of knowledge related to disease while the minority (10 %) had good level.

Part (b):

Table (5): Percentage (%) distribution of study group related to their level of self management activities (n=100).

Items	Good	Average	Poor
	%	%	%
-Vascular access "fistula" care:	93	7	0
-Fluid and diet restriction:	51	43	6
- Medication adherence:	39	61	0

This table (5) showed that the majority of studied patients (93%) had good level of care related vascular access, while the minority of them (39%) had good level of self management related to medication adherence.

Figure (2): percentage distribution of study patients' total self management score (n=100).

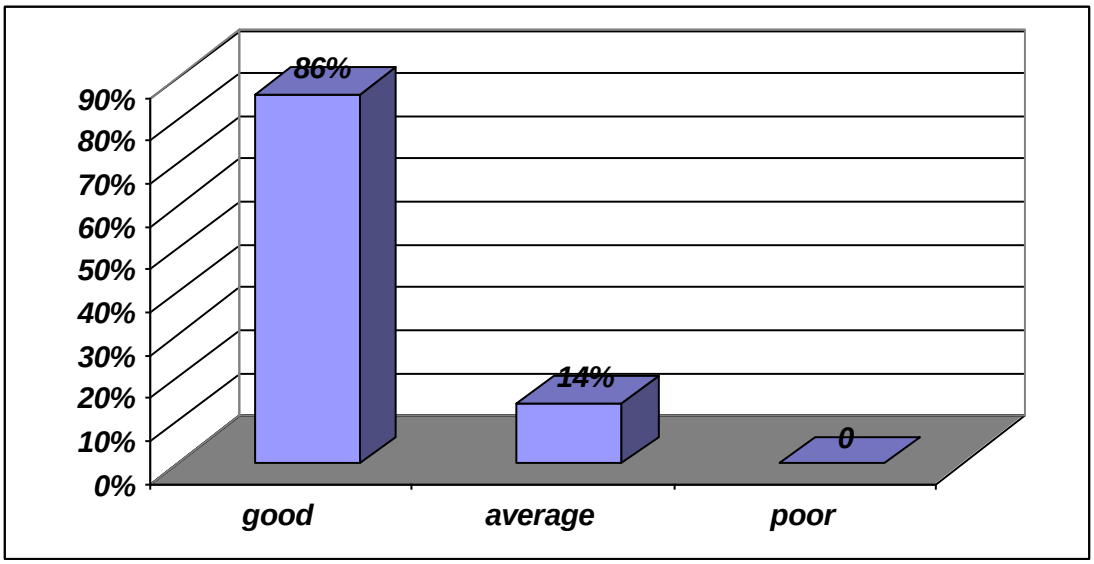


Fig. (2) Illustrates that, the majority of studied patients (86%) had good level of self management, while the minority of them (14%) had average level of self management.

Table (6): Percentage (%) distribution of study patients according to the physical factors that affect patients' self management (n=100).

physical factors	Never occur	Sometimes occur	Moderately occur	Often occur	Severely occur
	%	%	%	%	%
I-Digestive system:					
* Constipation	71	28	1	0	0
* Nausea	40	41	13	4	2
* Vomiting	41	35	18	5	1
* Diarrhea	35	27	11	8	1
* Anorexia	57	31	10	2	0
* Mouth dryness	51	30	10	8	1
II-Musculoskeletal system:					
*Muscle cramps	33	44	17	1	5
*Foot swelling	8	43	31	15	3
*Foot discomfort	39	37	12	11	1
*Joint pain	12	35	17	28	8
*Muscle pain	22	51	8	16	3
III-Respiratory system:					
* Dyspnea	31	40	21	7	1
*Cough	14	17	19	35	15
*Chest pain	13	27	28	26	6
IV-Neurological system:					
*Dizziness	40	37	11	11	1
*Tingling the extremities	13	42	32	8	5
*Fatigue	11	29	30	25	5
*Headache	19	29	32	16	4
*Low concentration	14	40	26	15	5
*tension	35	26	11	6	4
*nervous	22	45	22	8	3

Table (6) summarizes the physical problems which caused by CRF among studied sample. Of digestive system, it was noticed that the most of the studied patients (71%) were not suffer from constipation, while concerning with musculoskeletal system more than half of them (51%) sometimes were suffered from the muscles pain. Also this table had shown that more than one third of studied patients (40% and 45%) sometimes were suffered from dyspnea related to respiratory system and nervousness related to neurological system disturbances respectively.

Table (7): Percentage (%) distribution of study patients related to social factors that affect patients' self management (n=100).

Social factors	Never	Sometimes	often	Always
	%	%	%	%
- Low social activities as social visiting.	31	26	20	23
- Difficult for maintaining on social habits.	35	33	29	3
- Disease intervening with social relationships.	23	36	31	10
- Disease intervening with working natural.	31	33	28	8
- Disease causing family sadness.	11	28	41	20
- Disease causing family problems.	5	24	45	26
- I'm becoming busy with my disease than my family	14	39	33	14
- Doing things that making the others to be anger.	15	54	19	12
- Medication cost over than my income.	21	65	12	2
- The friends support is low.	12	46	26	16

Table (7) demonstrated that more than half of the studied patients (54%) were complained sometimes from doing things that making the others to be anger. However, It was obvious that around the half of patients (45%) were usually complained from that the disease causing family problems.

Table (8): Percentage (%) distribution of study patients related to psychological factors that affect patients' self management (n=100).

Psychological factors	Never	sometimes	often	Always
	%	%	%	%
- Feeling with tension.	49	37	9	5
- I still enjoy every thing that I was enjoying before.	9	40	46	5
- I feeling with fear that fritting things will be occurred.	10	38	4	7
- I can laugh when I see the laughing side of the things.	33	37	24	6
- I have anxiety thoughts.	9	24	43	24
- I'm feeling with happiness.	28	43	24	5
- I can set in relaxation.	1	38	57	4
- I feel my self lazy.	5	22	55	18
- I'm feeling with intestinal discomfort due to psychological factors.	6	19	42	33
- I loss interesting with my personal appearance.	19	35	38	8
- I'm feeling with psychological discomfort during the movement.	22	20	33	25
- I'm searching for the happiness things.	39	35	19	7
- I'm feeling with sudden fea & depression.	5	35	43	17
- I'm interesting with reading and watching T.V.	10	17	4	33

Table (8) revealed that more than half (57% & 55%) of the studied patients were sometimes able to set in relaxation and feeling themselves lazy respectively, while it was obvious that less than half of them (43%) were sometimes feeling with sudden fear and depression and anxiety thoughts.

Table (9): Percentage (%) distribution of study group according to self efficacy scale (n=100).

Self efficacy scale	%
- Not at all true	0
- Hardly true	0
- Moderate true	39
- Exactly true	61

This table (9) indicated that nearly two thirds (61%) of studied patients had exactly true of self efficacy scale, while more than one third (39%) had moderately true of self efficacy scale.

Figure (3): Percentage Distribution of the Study Patients' Total Self Efficacy Score (n=100).

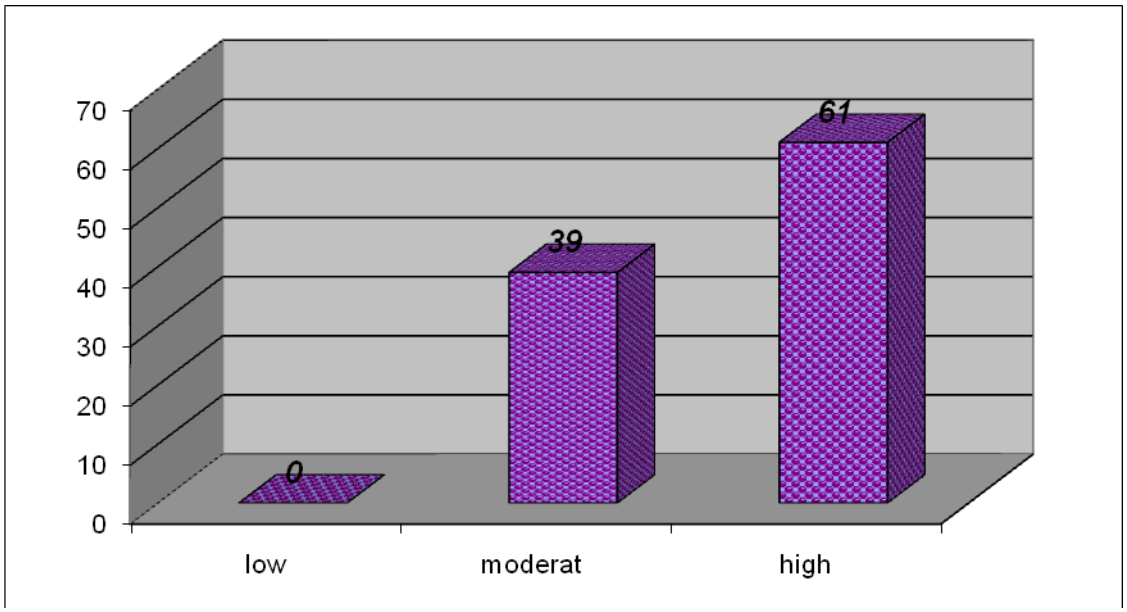


Fig. (3) Illustrates that, nearly two thirds (61%) of studied patients had high level of self efficacy, while relatively one third (39%) of them had moderately level of self efficacy.

Table (10): Relations between the patients' total knowledge score about (CRF and HD) and demographic characteristic (n=100).

Patient knowledge / demographic characteristic	Poor	Average	good	X^2	P value
	%	%	%		
Age (Year):					
* 20 < 30	1	17	1	4.937	> 0.05*
* 30 < 40	3	33	4		
* 40 < 50	1	26	2		
* > 50	0	9	3		
Sex:					
* Female	3	34	5	1.067	> 0.05
* Male	2	51	5		
Educational level:					
* Illiterate	3	67	9	2.323	> 0.05
* Primary education	0	1	0		
* High school	0	1	0		
* University	2	16	1		
Occupational status:					
* Work	3	45	6	0.256	> 0.05
* Not work	2	40	4		
Marital status:					
* Married	3	71	5	9.152	> 0.05
* Divorced	0	12	5		
* Widow	0	1	0		
* single	2	1	0		
Residence:					
* Rural	1	50	5	3.05	> 0.05
* Urban	4	35	5		

* $p>0.05$ no statistically significant

The results in table (10) indicated that, there is no statistically significant relation ($p>0.05$) between patients knowledge related to disease and socio-demographic characteristics such as age, sex, educational level, occupational status and residence.

Table (11): Relations between total self management score and demographic characteristic (n=100).

self management / demographic characteristic	Poor self management %	Average self management %	Good self management %	X^2	P value
Age (Year):					
* 20 < 30	0	6	10	0.005	> 0.05*
* 30 < 40	0	4	40		
* 40 < 50	0	1	27		
* > 50	0	3	9		
Educational level:					
* Illiterate	0	7	9	19.386	< 0.001***
* Primary education	0	0	20		
* High school	0	2	40		
* University	0	5	17		
Occupational status:					
* Work	0	8	46	0.065	> 0.05
* Not work	0	6	40		
Sex:					
* Female	0	6	36	0.005	> 0.05
* Male	0	8	50		
Marital status:					
* Married	0	14	65	4.32	> 0.05
* Divorced	0	0	19		
* Widow	0	0	1		
* Single	0	0	1		
Residence:					
* Rural	0	10	46	0.614	> 0.05
* Urban	0	4	40		

* p>0.05 no statistically significant
*** p<0.001 very highly statistically significant

Data presented In Table (11) reported that there were no statistical significant relations (P > 0.05) between self management and patients age, occupational status, sex and residences, while there were highly statistical significant relations (P < 0.001) between educational level of patients and level of self management, where, more than one third of studied patients (40 %) had high school education and good self management.

Table (12): Relations between Total self efficacy score and demographic characteristic (n=100).

self efficacy scale / demographic characteristic	Low level	Moderately level	High level	X^2	P value
	%	%	%		
Age (Year):					
* 20 < 30	0	9	10	3.391	> 0.05*
* 30 < 40	0	12	28		
* 40 < 50	0	12	17		
* > 50	0	6	6		
Educational level:					
* Illiterate	0	5	11	5.486	> 0.05
* Primary education	0	9	11		
* High school	0	18	24		
* University	0	7	15		
Occupational status:					
* Work	0	26	30	1.199	> 0.05
* Not work	0	13	31		
Sex:					
* Female	0	17	25	0.0867	> 0.05
* Male	0	22	36		
Marital status:					
* Married	0	30	49	2.315	> 0.05
* Divorced	0	8	11		
* Widow	0	1	0		
* Single	0	0	1		
Residence:					
* Rural	0	16	40	2.234	> 0.05
* Urban	0	23	21		

***** p>0.05 no statistically significant

Table (12) showed the relations between self efficacy scale and socio-demographic data. From these results, it could be noticed that there were no statistical significant relations (P > 0.05) between patient's socio-demographic characteristics and self efficacy.

Table (13): Correlations between total self management score and total factors (physical, social and psychological) (n=100).

Variable	self management	
	r	p
Total physical factors	+ 0.196	< 0.05**
Total social factors	⁻ 0.167	> 0.05*
Total psychological factors	+ 0.079	> 0.05*

***** p>0.05 no statistically significant
****** p<0.05 statistically significant

Results in this Table (13) indicated that there were positive correlations with statistically significant between self management and total physical factors and positive correlations with no statistically significant between self management and psychological factors.

Table (14): Correlations between total self efficacy score and total factors (physical, social, psychological) and total self management (n=100).

Variable	self efficacy	
	r	p
Total physical factors	- 0.191	< 0.001***
Total social factors	+ 0.150	> 0.05*
Total psychological factors	- 0.057	> 0.05*
Total self management	+ 0.339	< 0.05**

***** p>0.05 no statistically significant
****** p<0.05 statistically significant
******* p<0.001 very highly statistically significant

As clear in Table (14), there was positive correlation with no statistically significant between self efficacy and total social factors while there was positive correlation with statistically significant between self efficacy and total self management.