Results

The present study composed of the following tabulated data which presented in tables (1-18) and included the following parts :

Part I : Studied Sample Characteristics (table 1-2).

Part II : Knowledge of Studied Sample about Hepatitis C virus and Hemodialysis (table 3-6).

Part III knowledge of Studied Sample about applying infection control (table 7).

-Total score of nurses' regarding their knowledge (table 8).

- Relation between total score of nurses' knowledge and their socio demographic characteristics (table 9-11).

Part VI: - practice of Studied Sample about regarding nursing care to children with HCV under Hemodialysis (table112).

- Total score of nurses' regarding their practice (table 13).

-Relation between total score of nurses' practice and their socio demographic characteristics (table 14-17).

- Correlation between total score of nurses' knowledge and Their total score practice (table18).

Part I: - Studied Sample Characteristics

Table (1):- Distribution of the Studied nurses According to their Characteristics

Items	No. n=100	100%
- Age:		
< 20 year	37	37.0
20 – <30 year	10	10.0
30 - <40 year	41	41.0
>40 year	12	12.0
Mean ± St .D	**29.03 ± 9.70 years**	
- Years of Experience:		
< 1 years	8	8.0
< 3years	22	22.0
<5 years	27	27.0
>5 years	43	43.0
Mean ±St .D	**4.6 ± 2.7** years	
- Jop:		
Technical nurses	15	15.0
Supervisor	15	15.0
Staff nurse	47	47.0
Head nurse	23	23.0
- Academic Qualification:		
• Diploma (Secondary School)	72	72.0
• Technical Institute of Nursing	18	18.0
• Bachelor of Nursing	10	10.0
- Attending Training courses		
1- Attending	23	23.0
2- Not attending	77	77.0
Total	**100**	**100%**

Table (1) illustrated that, there mean ages were 29.03±9.70 years. Regarding to years of experience, more than one third (43%) of the studied nurses' had more than 5 years. Nearly half (47%) of them were staff nurses. According to academic qualification, more than two thirds (72%) of the studied nurses' had diploma. Also 60% of the studied subjects worked at Benha University and 40% of them at Benha teaching hospital and about one third 23% attending training courses and more than two thirds (77%) didn't attend any training courses.

Table (2): Distribution of the Children According to their Characteristics.

Items	No. n = 100	%
-Age:		
6 - 9 year	21	21.0
9 - 12 year	44	44.0
12 -15 year	25	25.0
15-18 year	10	10.0
Mean ± ST. D	11.4 ± 2.8 years	
-Gender of Children:		
Male	39	39.0
Female	61	61.0
-Rank:		
First	7	7.0
Second	53	53.0
Third	25	25.0
Others	15	15.0
-Education:		
Primary	9	9.0
Preparatory	5	5.0
Secondary	16	16.0
Uneducated	70	70.0
-Years of hemodialysis:		
1 year	36	36.0
2 year	13	13.0
3 year	9	9.0
Dialysis for long period	42	42.0
Mean ± ST. D	3.6 ± 4.7 years	

Table (2) illustrated characteristics of children, where the mean age of them was 11.4±2.8 years. More than two thirds (61%) were female. More than half (53%) ranked as the second child. According to education, 70% of children were un educated. On the other hand, this table revealed that more than one third 42% were on hemodialysis for more than four years.

Part II: - Knowledge of Studied Sample about Hepatitis C virus and Hemodialysis

Table (3): Distribution of the Studied Nurses According to their Knowledge about Hepatitis C virus

Knowledge of nurses / Items	Good		Average	
	No. n = 100	% 100.0	No n = 100	% 100.0
Definition of HCV	83	83.0	17	17.0
Causes	65	65.0	35	35.0
Signs and symptoms of HCV	25	25.0	75	75.0
Incubation period	20	20.0	80	80.0
diagnosis	23	23.0	77	77.0

Table (3) illustrated, the majority of the studied nurses (83%) had known correctly definition about HCV. Meanwhile, (65%) of them knew the causes of HCV. On the other hand, less than one quarter (20%, 23%) of the studied nurses didn't know the correct Incubation and diagnosis for HCV respectively.

Table (4): Distribution of the Studied Nurses According to their Knowledge about Mode of Transmission, Immunization, and Precaution during blood Transfusion, Mode of Prevention and Complication

Knowledge of nurses / Items	Good		Average	
	No. n = 100	% 100.0	No. n = 100	% 100.0
Mode of transmission	37	37.0	63	63.0
Immunization	21	21.0	79	79.0
Precaution during blood Transfusion	30	30.0	70	70.0
Mode of prevention	42	42.0	58	58.0
Complication.	45	45.0	55	55.0

Table (4): Illustrated that, nurses had good knowledge about the items in the above table were less than half, (37%, 42%, 21%, 30%, 42%, 45%) respectively.

Table (5): Distribution of the Studied Nurses according to their Knowledge about nursing role toward Children with HCV and their Family

Knowledge of nurses / Items	Good		Average	
	No. n = 100	% 100.0	No. n = 100	% 100.0
Nursing role regarding child stressors	67	67.0	33	33.0
Nursing role regarding family stressors	57	57.0	43	43.0
Treatment of HCV	42	42.0	58	58.0
Type of Treatment of HCV	31	31.0	69	69.0

Table (5): Showed that more than half (67%, 57%) of the studied nurses had good knowledge about their role towards children and their family stressors respectively. Meanwhile, 42% and 31% of the studied nurses reported good knowledge about Treatment and Type of Treatment of HCV.

Table (6): Distribution of the HD Studied Nurses according to their Knowledge about Hemodialysis

Knowledge of nurses / Items	Good		Average	
	No. n = 100	% 100.0	No. n = 100	% 100.0
Definition	37	37.0	63	63.0
Preparation before HD	30	30.0	70	70.0
During HD	35	35.0	65	65.0
Post HD	30	30.0	70	70.0
Nursing care to HD child	61	61.0	39	39.0
Nursing role toward clean HD unite	40	40.0	60	60.0

Table (6): Revealed that, less than half of the studied nurses (37%, 30%, 35%, 30% and 40%) had good knowledge about Hemodialysis in relation to definition, Preparation before, During and Post Hemodialysis and their role toward clean HD unit. On the other hand, more than half (61%) of them had good knowledge about their nursing care for child under HD.

Part III: - knowledge of Studied Sample about applying infection control

Table (7): Distribution of the Studied Nurses regarding to Healthy Basics for Personal Hygiene and Sterilization and Universal Precautions and Waste Management

Knowledge of nurses / Item	Good		Average		Poor	
	No. n = 100	% 100.0	No. n = 100	% 100.0	No. n = 100	% 100.0
Healthy basic for personally hygiene	29	29.0	71	71.0	0	0.0
Safety of all workers	31	31.0	69	69.0	0	0.0
Time for hand washing	28	28.0	72	72.0	0	0.0
Basic principles for sterilization	35	35.0	65	65.0	0	0.0
Universal precaution	48	48.0	21	21.0	31	31.0
Waste management	59	59.0	14	14.0	27	27.0

Table (7): Showed that more than two thirds (71%, 69%, 72%, 65%) of nurses had incorrect knowledge about healthy basics for personally hygiene, safety of all workers, Time for hand washing and Basic principles for sterilization respectively, less than half (48%) of the studied nurses had good knowledge about universal precaution meanwhile more than half of them (59%) had good knowledge about waste management.

Table (8): Distribution of the Studied Nurses according to Total Knowledge Regarding HCV in Children under Hemodialysis

Level of knowledge	Nurses' knowledge (n=100)	
	No.	%
Good (80-100%)	20	20.0
Average (60-80%)	80	80.0
Total	100	100%

Table (8): viewed that, the majority of studied nurses(80%) had an average level of total knowledge regarding HCV in children under hemodialysis.

Table (9): Relation between Total score of Nurses' Knowledge and their Age

Age	Nurses' Knowledge (n=100)					
	Good		Average		X^2	P
	No.	%	No.	%		
< 20 Years	3	3.0	34	34.0	20.57	<0.001
20- <30Years	0.0	0.0	10	10.0		
30- <40Years	17	17.0	24	24.0		
> 40 Years	0.0	0.0	12	12.0		
Total	20	20%	80	80%		

Table (9): showed that, more than one third (34%)of studied nurses < 20 years had an average knowledge about HCV, while 17 % of them their ages were **30- <40** years had a good knowledge about HCV. Meanwhile, 3% of studied nurses < 20 year had good knowledge about HCV, and there was statistically significance differences between nurses knowledge and their ages ($\mathbf{X^2}$ 20.57& P<0.001).

Table (10): Relation between Nurses‘ Knowledge and their Academic Qualifications

Academic Qualification	Nurses‘ knowledge (n=100)					
	Good		Average		X^2	P
	No.	%	No.	%		
Diploma	5	5.0	67	67.0	55.29	<0.001
Technical Institute of nursing	15	15.0	3	3.0		
Bachelor of Nursing	0	0.0	10	10.0		
Total	20	20%	80	80%		

Table (10)**:** showed that, there was a statistically significance differences (X^2 55.29 P <0.001) between nurses‘ knowledge and their qualifications, where more than two thirds (67%) of the diploma studied nurses had average knowledge about HCV.

Table (11): Relation between total Score of Nurses' Knowledge and their years of Experience

Nurses' knowledge (n=100)						
Years of Experience	**Good**		**Average**		**X^2**	**P**
	No.	**%**	**No.**	**%**		
<1 Years	0	0	8	8.0	19.56	<0.001
< 3Years	3	3.0	19	19.0		
<5Years	0	0	27	27.0		
>5 Years	17	17.0	26	26.0		
Total	20	20%	80	80%		

Table (11) showed that, more than quarter (27%) of studied nurses who had an average level of knowledge had experience < 5 years, while 3% of them had good level of knowledge where their years of experience <3 years. There was statistically significance differences between nurses knowledge and years of experience ($\mathbf{X^2}$ 19.56 & P<0.001).

Part V: - - practice of Studied Sample about regarding nursing care to children with HCV under Hemodialysis

Table (12): Distribution of the studied nurses according to their practice regarding Care for children with hepatitis C virus under haemodialysis

Nursing Practice				
Items	**Competent (n=100)**		**Incompetent (n=100)**	
	No	**%**	**No**	**%**
Hand washing	44	44.0	56	56.0
Blood pressure	57	57.0	43	43.0
Intravenous therapy	42	42.0	52	52.0
Blood transfusion	38	38.0	62	62.0
Centeral venous catheter site	35	35.0	65	65.0
Accessing central venous catheter	32	32.0	68	68.0

Table (12) illustrated that, the highest percentage of studied nurses (65%), (68%) had incompetent performance level about central venous catheter site and accessing central venous catheter. While, more than half of them (56%) had incompetent level about nursing practice of hand washing and more than half of studied nurses (57%) had competent level about nursing performance toward blood pressure and more than half of studied nurses (62%),(52%) had incompetent level about blood transfusion and intravenous therapy.

Table (13): Distribution of the Studied Nurses according to Their Total practice

Level of practice	Nurses' Practice (No=100) (n = 100)	
	No	**%**
Competent (>80%)	38	38 .0
Incompetent (<80%)	62	62 .0
Total	100	100%

Table (13): viewed that, more than two thirds of studied nurses (62%) had incompetent level of practice.

Table (14) : Relation Between Nurses' Practice and their Age

Age	Nurses' Practice (n=100)					
	Competent (>80%)		Incompetent (<80%)		X^2	P
	No.	%	No.	%		
< 20 Years	30	30	7	7	48.57	<0.001
20 – < 30 Years	0	0	10	10		
30 - <40 Years	8	8	33	33		
>40 Years	0	0	12	12		
Total	38	38%	62	62%		

Table (14**)** showed that, there was a highly statistically significant differences between ages of the studied nurses and their practice (X^2 48.57& P <0.05), where nearly one third of the studied nurses 33% their ages between 30-<40 years had the incompetent level of performance.

Table (15): Relation between Nurses‘ Practice and their Academic Qualification

Academic Qualification	Nurses‘ Practice (n=100)					
	Competent		Incompetent		X^2	P
	No	%	No	%		
1- Diploma	30	30.0	42	42.0	6.827	<0.05
2- Nursing Institute	8	8.0	10	10.0		
3-Bachelor of Nursing	0	0.0	10	10.0		
Total	38	38%	62	62%		

Table (15) showed that, there was a statistical significance differences (X^2 6.827& P >0.05) between nurses' qualifications and their Practice, where 42% of them with diploma had the incompetent level of Practice.

Table (16): Relation between Nurses' Practice and Their years of Experience

Years of Experiences	Nurses' Practice (n=100)				X^2	P
	Competent		Incompetent			
	No.	%	No.	%		
< 1 years	8	8.0	0	0.0	50.046	<0.001
< 3 years	19	19.0	3	3.0		
<5 years	3	3.0	24	24.0		
> 5 years	8	8.0	35	35.0		
Total	38	38	62	62		

Table (16) showed that, there was a highly statistical significant differences (X^2 50.046& P <0.05) between nurses' years of experiences and their Practice, where more than one third of them (35%) who had >5 years of experience had incompetent level of practice.

Table (17): Relation between Nurses' Practice and their Attending Training Courses

Nurses' Practice (n=100)						
Items	**Competent**		**Incompetent**		**X^2**	**P**
	No.	**%**	**No.**	**%**		
Training Courses					48.7	<0.001
1- Attending	13	13.0	10	10.0		
2- Not attending	25	25.0	52	52.0		
Total	38	38%	62	62%		

Table (17) showed that, there was a highly statistical significance (X^2 48.7 & P<0.001) between nurses' Practice and their attending training courses related to HCV. Where more than half of them (52%) who didn't attend training courses had an incompetent level of performance regarding HCV in children under haemodialysis.

Table (18): Correlation Between Nurses‘ Knowledge and Their practice Regarding HCV in Children under Hemodialysis

Item	r	P
Nurses‘ Knowledge	-0.782	<0.001
Nurses‘ Performance		

Table (18) Revealed that, there was a highly statistical significance correlations between nurses‘ knowledge and their practice regarding HCV (X^2 -0.782 and P <0.001).