Correlation between Psychological Problems, Self-esteem and Quality of Life among Children with Chronic Renal Failure

Hoda Abd El-moaty Mahmoud [1], Hend Ahmed Mostafa [2] and Doha Abdel-baseer Mahmoud[3]

(1) Lecturer of Psychiatric and Mental Health Nursing, Faculty of Nursing, Benha University, Egypt and (2,3) Assistant professor of Psychiatric and Mental Health Nursing, Faculty of Nursing, Benha University, Egypt

Abstract

Background: Chronic renal failure among children is considered a serious problem that causes many negative changes not only physical but also, psychological which negatively affect their self-esteem and quality of life. **Aim of the study:** This study aimed to assess the correlation between psychological problems, self-esteem and quality of life among children with chronic renal failure. **Research question:** What is the correlation between psychological problems, self-esteem and quality of life among children with chronic renal failure? **Design:** A descriptive correlational research design was utilized in this study. **Setting:** This study was conducted at children renal dialysis unit, at Benha university hospital which affiliated to Ministry of High Education, Benha City, Qalyubia governorate. **Sample:** A purposive sample of (100) children with chronic renal failure were taken from the above-mentioned setting. **Tools:** Tool (1): A structured Interviewing Questionnaire Sheet, Tool (11): Depression, Anxiety and Stress Scale (DASS), Tool (111): Rosenberg Self-Esteem Scale: and Tool (V): Quality of life Scale. **Results:** Findings revealed that less than two thirds of the studied children had moderate level of psychological problems (depression, anxiety and stress) and more than half of them had low levels of self-esteem and quality of life. **Conclusion:** Based on the results of the present study, it was concluded that there was a highly statistically significant negative correlation between total psychological problems and total self-esteem and total quality of life scales, while there was a highly statistically significant positive correlation between total self-esteem and total quality of life scales among the studied children. **Recommendation:** Psycho-educational program should be an integral part of comprehensive care for all children with chronic renal failure to decrease their psychological problems and enhance their self-esteem and quality of life.

Keywords: Chronic Renal Failure, Psychological Problems, Self-Esteem, Quality of Life.

Introduction:

Chronic renal failure is a complex syndrome that triggered by structural abnormalities and/or irreversible loss of kidney functions for more than three months. It is considered a silent pathology since in general; children do not show symptoms until a serious dysfunction manifests itself. Hemodialysis is considered the most common and frequent treatment method for all pediatric patients with chronic renal failure.

Hemodialysis is a technique that uses a special filter or semi-permeable membrane that allows the blood to pass through it. The filter then removes the extra water, body waste and toxic products from the blood. This procedure cleans the blood, maintains the homeostatic environment of the body and regulates the normal blood pressure through maintaining the proper fluid and electrolyte balance inside the body **(Shroff et al., 2021)**.

Pediatric patients with chronic renal failure and undergoing hemodialysis not only are faced with many physical changes, but also suffer from many psychological problems, such as depression, anxiety and stress which can disrupt their status and personality. These psychological problems may develop as a response to being ill or in the hospital all the time, inability to complete educational programs and meet educational goals, estrangement from poor or unsupportive relationships with friends and family members, Inability to take part in community activities, sleep disturbances, chronic inflammation, increased fatigue, uremia, changing in body appearance, restrictions in diet and fluids, dependency on hemodialysis machine and uncertainly about future. All of these can increase the severity of the preexisting physical illness by, disturbing cardiac and nervous system, and decreasing immune functions **(Bouali et al., 2021).**

Self-esteem means an overall assessment of the children worthiness, expressed in a positive or negative orientation towards them. Moreover, self-esteem among pediatric patients undergoing hemodialysis refers to psychological well-being, and how the child feels satisfied with his/her life and the affections related to his/her body are positive, that expressed in their stable emotional responses over the time and reflecting acceptance of his/her self-image, as well as in the adaptation of processes arising from his/her life cycle and social relationships **(García et al, 2021)**.

In addition, pediatric patients with renal failure and undergoing hemodialysis always suffer from low self-esteem as a result of many factors such as chronic pain, fatigue, complication of hemodialysis, many physical changes occurring in their bodies as uremia-related skin changes, changes in skin color due to anemia (resulting from bone marrow suppression due to uremia), having a continuous shunt or fistula in the arm, weight gain due to fluid overload can negatively affect the children' self-esteem. In addition, these changes in body image may cause the child to feel alienated, lose his/her confidence and social relations, and experience fear of rejection by others, deterioration of self-care behaviors, and feelings of despair, anxiety and depression all the time **(Oyekcin et al., 2021)**.

Quality of life can be defined as the term that refers to a general sense of well-being, and addresses multiple dimensions of life. Quality of life is also defined as the interactions of physical, social, psychological and spiritual well-being. Pediatric patients with chronic renal failure generally suffer from low quality of life either in short or long term as they are likely to become deeply dependent on others in many aspects of their daily life activities, such as self-care, educational requirements as a result of hemodialysis which in turn would affect their familial relationships and social network. In addition, chronic pain, negative body image, low self-esteem and self-efficacy also negatively affect all domains of quality of life **(Coelho & Martins, 2020)**.

Finally, the researchers can say there is a great relationship between psychological problems, self-esteem and quality of life among pediatric patients undergoing hemodialysis as the impairment in self-esteem and quality of life is likely to be a direct corollary of depressed mood and elevating stress and anxiety among them. So it becomes vital for psychiatric mental health nurse to assess the hemodialysis children holistically to identify these marked psychological

problems, self-esteem and quality of life **(Marthoenis et al., 2021)**.

Furthermore, Psychiatric and mental health nurse should identify what coping styles children are currently using, how they have coped with stress, anxiety and depression in the past and how they plan to deals with the stresses of dialysis. Using skilled communication techniques, renal nurses are able to identify individual child needs and to assist in the setting of goals. Caregivers also need to provide consistent reassurance and to actively listen to the difficulties children are experiencing in a non-critical and non-judgmental manner **(Nobogan, 2020) & (Amutha, 2021)**.

Significance of the study:

Chronic renal failure and hemodialysis in the pediatric population are widely prevalent and are associated with devastating consequences either physical as chronic pain, negative body image or psychological such as stress, anxiety and depression which negatively affected their self-esteem and hence their quality of life **(Chanchlani et al., 2021).In Egypt**, According to world health organization **(WHO)** the prevalence of children with chronic failure and undergoing hemodialysis is around (230) children per million while the epidemiology **worldwide** is about 30.3% **(WHO, 2021)**. According to statistical records of Benha university hospital, the number of children (aged 8-18 years) undergoing hemodialysis and admitted to hemodialysis unit was (245) cases in 2023. These changes in behavior and psychological state can affect negatively not only physical health but also, social life and all quality of life domains. So, there is an important need for the researchers to conduct this study to assess the correlation between psychological problems, self-esteem and quality of life among children with chronic renal failure.

Aim of the study:

This study aimed to assess the correlation between psychological problems, self-esteem and quality of life among children with chronic renal failure.

Research questions:

What is the correlation between psychological problems, self-esteem and quality of life among children with chronic renal failure?

This can be achieved through the following questions:

1- What are the levels of psychological problems, self-esteem and quality of life among children with chronic renal failure?

4- What is the correlation between psychological problems, self-esteem and quality of life among children with chronic renal failure?

Subject and Methods:

Design: A descriptive correlational design was utilized to achieve the aim of this study.

Setting: The current study was conducted at the children renal dialysis unit, at Benha university hospital which affiliated to Ministry of High Education, Benha City, Qalyubia governorate. The hemodialysis unit consists of (4) rooms, each room contain (4) dialysis machines that operate three cycle a day throughout the week. There are (30) nurses, (3) head nurses and (6) physician in the hemodialysis unit.

Subjects:

Sample Size:

Based on the past review of literature that examined the same outcome and found significant differences, a sample size has been calculated using the following equation:- $n = (z^2 \times p \times q)D^2$ At power 80% and CI 95%.

The calculated sample size was 100 children with chronic renal failure.

Sample Technique:

A purposive sample of (100) children with chronic renal failure were taken from the above mentioned setting according to the following **inclusion criteria and exclusion criteria:**

Inclusion criteria:

- Diagnosed with chronic renal failure and undergoing hemodialysis.
- Children aged (8-18) years (because the most common age of admission to children renal dialysis unit).
- Both sex.
- Children who able to talk and express themselves verbally.
- Willingness to participate in the study.

Exclusion criteria:

- Children below eight years.
- Children who have history of neurological disorders.
- Children who have history of psychotic symptoms.
- Children with visual and hearing impairment.

Tools of Data Collection:

Four tools were utilized for collecting data.

Tool (I): A Structured Interviewing Questionnaire Sheet:

It was developed by the researchers to achieve the aim of this current study after reviewing all available related literature and it includes two parts; **Part (1)** socio-demographic characteristics of studied children such as age, sex, education level, residence, number of family members, number of brothers and sisters, ranking among the sisters and brothers and family monthly income. **Part (2)** Clinical data of the studied children. It was developed by the researchers such as age of onset of the disease, duration of suffering from renal failure, number of session per week, opinion about hemodialysis process, having any other chronic diseases, having any family member suffering from the same disease).

Tool (II):-Depression, Anxiety and Stress Scale (DASS):

Depression, Anxiety and Stress Scale was developed by **Lovibond, S. & Lovibond, P., (1995),** and adapted by the researchers. This scale was used to assess psychological problems among children with chronic renal failure and undergoing hemodialysis, the DASS was consists of 21items, based on three subscales of depression subscale (7 Items) anxiety subscale (7 Items), and stress subscales (7 Items). A DASS total score is computed from the three subscale scores of items rated on a four-point scale (did not apply to me at all=0, Applied to me to some degree =1, Applied to me to a considerable degree=2 and Applied to me most of the time =3. The total score of the scale was 63 grades. These scores were summed and were converted into a percent score.

The scoring system for DASS: Scores on the DASS-21 will need to be multiplied by 2 to calculate the final score. These scores were converted to percent score.

- Depression: normal 0-9, mild 10-13, moderate 14-20, severe 21and more.

-Anxiety: normal 0-7, mild 8-9, moderate 10-14, severe 15 and more.

- Stress: normal 0-14, mild 15-18, moderate 19-25, severe 26 and more.

Tool (III): Rosenberg Self-Esteem Scale:

This scale was originally developed by **Rosenberg (1965)** and adapted by the researchers. This scale was used to assess self-esteem level among children with chronic renal failure and undergoing hemodialysis. It consists of 10 items, 5 of them were **positive items,** their numbers are (1, 2, 3, 4 and 5), the scoring of answer for these positive items was (strongly agree = 3, agree = 2, disagree= 1, strongly disagree =0). While 5 of them were **negative items** their numbers are (6, 7, 8, 9 and 10). The scoring of answer for these negative items was (strongly agree = 0, agree = 1, disagree= 2, strongly disagree =3). The total score ranged from 0 to 30 with higher total score indicates high self-esteem. These scores were summed and were converted into a percent score.

The scoring system is categorized as following:

- Low self-esteem if the score (0-15 grades) (< 50%)
- Moderate self-esteem if the score (16-21 grades) (50% - < 70%)
- High self-esteem if the score (22-30 grades) (70% - ≥100%)

Tool (V): Quality of life Scale:

This scale was developed by **WHO, (2014)** and adapted by researchers. This scale was used to assess the level of quality of life among children with chronic renal failure and undergoing hemodialysis. It contains 4 sub scales**:**

1. Physical dimensions subscale: It consisted of 7 items (mobility, daily activity, energy and sleep).
2. Psychological dimensions subscale: It consisted of 6 items (self-image, self-esteem, self –attitudes and memory).
3. Social dimensions subscale: It consisted of 3 items (personal relations, social support and sexual life).
4. Environmental dimensions subscale: It consisted of 10 items (safety, financial resources, general environment, general Health, health services, recreational activities and general quality of life).

This scale consists of 26 items (13 positive and 13 negative items). Responses are made on a likert – type scale from 1 =Never, 2=Sometimes and 3 =Always for positive items. While responses for negative items are Never=3, Sometimes = 2 and Always = 1.

Positive items (4, 7, 9 , 11, 13 , 15 , 18 , 19 , 22 , 23 , 24 , 25 & 26).

Negative items (1, 2 , 3 ,5 ,6 , 8 , 10 ,12 , 14 , 16 ,17 , 20 &21) .

The total score was ranged from 26 - 78 and it was classified into 3 categories:

- Low quality of life if score (26-38 degrees) (< 50%).
- Average quality of life (39-58 degrees) (50 -% < 70%)
- High quality of life if score (59-78 degrees) (70-% ≥100%).

Methods:

The study was executed according to the following steps:

Administrative approval:

The researchers was obtained an official permissions letter from the dean of Faculty of Nursing, Benha University to the director of Benha university hospital with the aim of the study and copy from the tool to facilitate the collection of data.

Validity:

To achieve the criteria of trust and worthiness of the tools of data collection in this study, the tools were tested and evaluated for their face and content validity.

Face and content validity were tested by five experts in psychiatric and mental health nursing field. As some modifications will be done such as re-arranging of some sentences at self-esteem scale and quality of life scale, changing Arabic translation and rephrasing of some sentences at DASS scale to be more understandable and easier for the study participants in collecting data.

Reliability:

Reliability was applied by the researchers for testing the internal consistency of the tools, by administration of the same tools to the same participants under similar conditions on one or more occasions. Answers from repeated testing were compared (Test-re-Test reliability) by using Alpha Cronbach reliability. The tools were strongly reliable at (0.91) for DASS scale, (0.94) for self-esteem scale, and (0.93) for quality of life scale.

Ethical considerations:

- Approvals from ethical committee at faculty of nursing, Benha university was obtained before data collection and after explaining the aim of the study.
- Approvals from studied children with chronic renal failure and undergoing hemodialysis were obtained before data collection and after explaining the aim of the study.
- Anonymity was assured as the filled questionnaire sheets were given a code number (not by names).
- The studied participants were ensured that questionnaire sheet will be used only for the purpose of the study and will be discarded at the end of this study.
- The study manoeuvres do not entail any harmful effects on participation.
- The studied children who participated in the study were informed about having the right to withdraw at any time without giving any reason.

A Pilot study:

A pilot study was conducted to test the clarity, reliability, and applicability of tools. To achieve that, the study was tested on 10%of the total sample as (10) children with chronic renal failure and undergoing hemodialysis. This sample was excluded later from the actual study sample.

The results of the pilot study:

After conducting the pilot study, it was reflected that:

(1) The tools were clear and applicable; however, some modifications were made in rephrasing, rearrangement and re-translation of some sentences to be simple and more understandable for the studied children.

(2) Tools were relevant and valid.

(3) No problem interferes with the process of data collection was detected.

(4) Following this pilot study the tools were made ready for us

Field work:

The actual fieldwork for the process of the data collection has taken nearly three months started from beginning of March 2024 to the end of May 2024.The researchers collected the data from the study participants at 2 days (Monday& Thursday) per week at morning shift (10 a.m.-2 p.m.). The researchers was meeting with a number of children ranging from 4-5 children in each visit. The average time needed was around 20-25 minutes for DASS scale and self -esteem scale and about 15-20 minutes for quality of life scale as the researchers meet 4-5 children per day. At the beginning of interview the researchers greeted the studied children, introduced herself to each child, explained the purpose of the study, took oral consent to participate in the study, filled interviewing questionnaire sheet and data collection tools.

Statistical analysis:

The statistical analysis of data was done by using the computer software of Microsoft Excel Program and Statistical Package for Social Science (SPSS) version (20). Data were presented using descriptive statistics in the form of frequencies and percentage of categorical data, the arithmetic mean (X) and standard deviation (SD) for quantitative data. Qualitative variables were compared using chi square test $(X)^2$, P- value to test association between two variables and R- test to the correlation between the study variables.

Degrees of the significance of results were considered as follows :

- P- value > 0.05 Not significance (NS) .
- P- value < 0.05 Significant (S) .
- P- value < 0.000 Highly significance .

Results:

Table (1): Reflects percentage distribution of the studied pediatric patients with chronic renal failure according to their socio-demographic characteristics. It reveals that nearly one quarter (24%) of the studied pediatric patients are aged 12-<14 years and more than two thirds (68.0%) of them are males. Regarding education level, nearly half of them are at primary and preparatory schools (45.0% & 45% respectively). More than three quarters (80.0%) of them live at rural areas. More than one third (36.0%) of them are first ranking among their brothers and sisters. Concerning monthly income, more than half (60%) of the studied pediatric patients mentioned their families don't have enough income.

Table (2): Shows percentage distribution of the studied pediatric patients with chronic renal failure according to their clinical data. It illustrates that more than one third (37.0%) of the studied pediatric patients are aged from 8-<10 years at onset of the disease. As well, more than one third (34.0%) of them suffer from kidney failure for 5-<7 years. Regarding number of hemodialysis sessions per week, more than three quarters (84%) of the studied children have 3 sessions per week. In addition, nearly two thirds (65.0%) of them demonstrate hemodialysis process is not comfortable process. More than three quarters (85.0%) of them demonstrated not having any other chronic disease. Moreover, nearly two thirds (65%) of them report not having a family member suffering from the same disease.

Figure (1): Illustrates that total depression, anxiety and stress subscales among the studied pediatric patients with chronic renal failure. It explained that more than two thirds of the studied pediatric patients have moderate level of stress (68%).While more than half of them have moderate level of depression and anxiety (58% & 60% respectively).

Figure (2): Demonstrates percentage distribution of the studied pediatric patients with chronic renal failure according to total depression, anxiety and stress scale. It clarifies that nearly two thirds (65.0%) of the studied pediatric patients had moderate level of psychological problems (depression, anxiety and stress) and one quarter (25.0%) of them had severe level of psychological problems. While the minority (10%) of them had mild level of psychological problems (depression, anxiety and stress).

Figure (3): Reveals percentage distribution of the studied pediatric patients with chronic renal failure according to total self-esteem. It reports that more than half (58.0%) of the studied pediatric patients have low level of self-esteem, and about one third (34.0%) of them have moderate level of self-esteem, while the minority (8%) of them have high level of self-esteem.

Figure (4): Shows percentage distribution of the studied pediatric patients with chronic renal failure according to total quality of life. It illustrates that, more than half (58.0%) of the studied pediatric patients have low level of quality of life and about one third (34.0%) of them have average level of quality of life. While the minority (8.0%) of them have high level of quality of life.

Table (3): Demonstrates relationship between socio-demographic of the studied pediatric patients with chronic renal failure and the total depression, anxiety and stress. It displays that there is a highly statistically significant relation between studied pediatric patients' total level of depression, anxiety and stress with their education level and family monthly income at (P-value < 0.01**). In addition, there is a statistically significant relation between studied children's total level of depression, anxiety and stress scale and their socio-demographic items as age, sex, number of family members and number of brothers and sister at (P-value < 0.05*).

Table (4): Reflects relationship between socio-demographic characteristics of the studied pediatric patients with chronic renal failure and the total self-esteem. It reports that there is a highly statistically significant relation between studied pediatric patients' total self-esteem with their age and education level at (P-value < 0.01**). Furthermore, there is a statistically significant relation between studied children's total self-esteem and their family monthly income at (P-value < 0.05*).

Table (5): Demonstrates relationship between socio-demographic characteristics of the studied pediatric patients with chronic renal failure and the total quality of life. It presents that there is a highly statistically significant relation between studied pediatric patients' total quality of life and their educational level at (P-value < 0.01**). As well as, there is a statistically significant relationship between studied children's total quality of life with their age, number of family members and their family monthly income at (P-value < 0.05*).

Table (6): Explains relationship between clinical data of the studied pediatric patients with chronic renal failure and the total depression, anxiety and stress. It shows that there is a highly statistically significant relation between studied pediatric patients' total level of depression, anxiety and stress and their duration of suffering from kidney failure at (P-value <0.01**). In addition there is a statistically significant relation between studied children's total level of depression, anxiety and stress and their clinical items as age of onset of the disease, number of hemodialysis sessions, and hemodialysis process at (p-value <0.05*).

Table (7): Shows relationship between clinical data of the studied pediatric patients with chronic renal failure and the total self –esteem**.** It clarifies that there is a statistically significant relation between studied pediatric patients' total level of self-esteem and the duration of suffering from kidney failure, the number of hemodialysis sessions and having any other chronic diseases at (p-value <0.05*).

Table (8): Reports relationship between clinical data of the studied pediatric patients with chronic renal failure and the total quality of life. It reveals that there is a statistically significant relation between studied pediatric patients' total level of quality of life and the duration of suffering from kidney failure, number of hemodialysis sessions per week, hemodialysis process, and having any other chronic diseases at (p-value <0.05*).

Table (9): Clarifies correlation between total depression, anxiety and stress (DASS), total self-esteem and total quality of life scales among the studied pediatric patients with chronic renal failure. It reports that, there is a highly statistically significant negative correlation between total depression, anxiety

and stress and total self-esteem & total quality of life scales while there is a highly statistically significant positive correlation between total self-esteem and total quality of life among the studied pediatric patients at (P-value < 0.001**).

Table (1): Percentage distribution of the studied pediatric patients with chronic renal failure according to their socio-demographic characteristics (n=100).

Socio-demographic characteristics	Studied children (n=100)	
	N	%
1) Age		
8-<10 years	21	21.0
10-<12 years	19	19.0
12- <14 years	**24**	**24.0**
14-<16 years	10	10.0
16- ≥ 18 years	26	26.0
$\bar{x}$S. 12.3 +1.56 years		
2) Sex		
Male	**68**	**68.0**
Female	32	32.0
3) Education level		
Primary school	**45**	**45.0**
Preparatory school	**45**	**45.0**
Secondary school (diploma)	10	10.0
4) Residence		
Urban	20	20.0
Rural	**80**	**80.0**
5) Number of family members		
From 3 to 5 person	**65**	**65.0**
From 6 to 8 person	35	35.0
9 persons and more	0	0
6) Number of brothers and sister		
One	10	10.0
Two	30	30.0
Three or more	**60**	**60.0**
7) Ranking among the sisters and brothers		
First	**36**	**36.0**
Second	25	25.0
Third	29	29.0
Last	10	10.0
8) Monthly Income		
Enough	30	30.0
Not enough	60	60.0
Enough and increase	10	10.0

Table (2): Percentage distribution of the studied pediatric patients with chronic renal failure according to their clinical data (n=100).

Clinical data	Studied children (n= 100)	
	N	%
1) Age of onset of the disease		
8-<10 years old	**37**	**37.0**
10-<12 years old	23	23.0
12-<14 years old	10	10.0
14-<16 years old	15	15.0
16-≥18 years old	15	15.0
$\bar{x}$S.D 11.43±2.44		
2) Duration of suffering from kidney failure		
1-<3 years	34	34.0
3-<5 years	25	25.0
5-<7 years	**34**	**34.0**
7 years or more	7	7.0
$\bar{x}$S.D 4.22±0.88		
3) Number of hemodialysis sessions per week		
2 sessions	12	12.0
3 sessions	**84**	**84.0**
4 sessions	4	4.0
4) Hemodialysis process is		
Comfortable	10	10
Not comfortable	**65**	**65**
Very tired and possible complications can occur during the hemodialysis sessions	25	25
5) Having any other chronic diseases?		
Yes	15	15.0
No	**85**	**85.0**
If yes, what are the type of the diseases?(n=15)		
Diabetes	3	20.0
High blood pressure	**12**	**80.0**
6) Having any family member suffering from the same disease?		
Yes	35	35
No	**65**	**65**
If the answer is yes, the degree of the relationship n=(40)		
First degree relatives	19	47.5
Second degree relatives	**21**	**52.5**

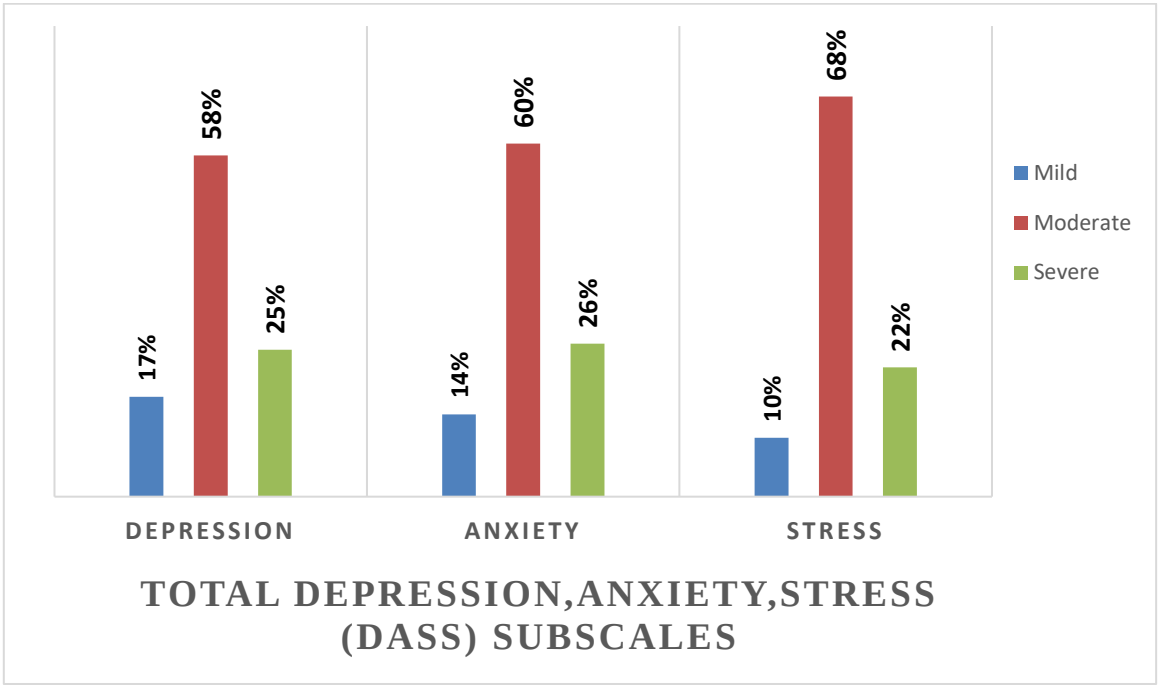

Figure (1): Percentage distribution of the studied pediatric patients with chronic renal failure according to total depression, anxiety and stress subscales (n=100)

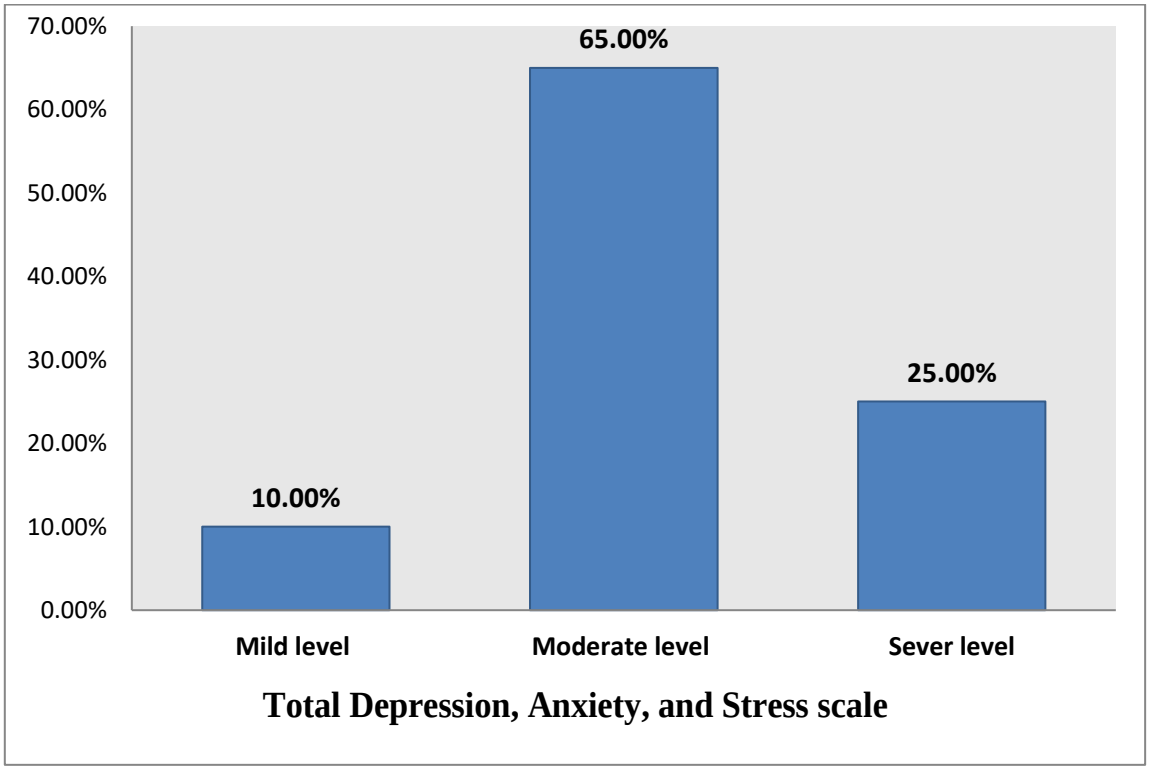

Figure (2): Percentage distribution of the studied pediatric patients with chronic renal failure according to total depression, anxiety and stress scale (n=100).

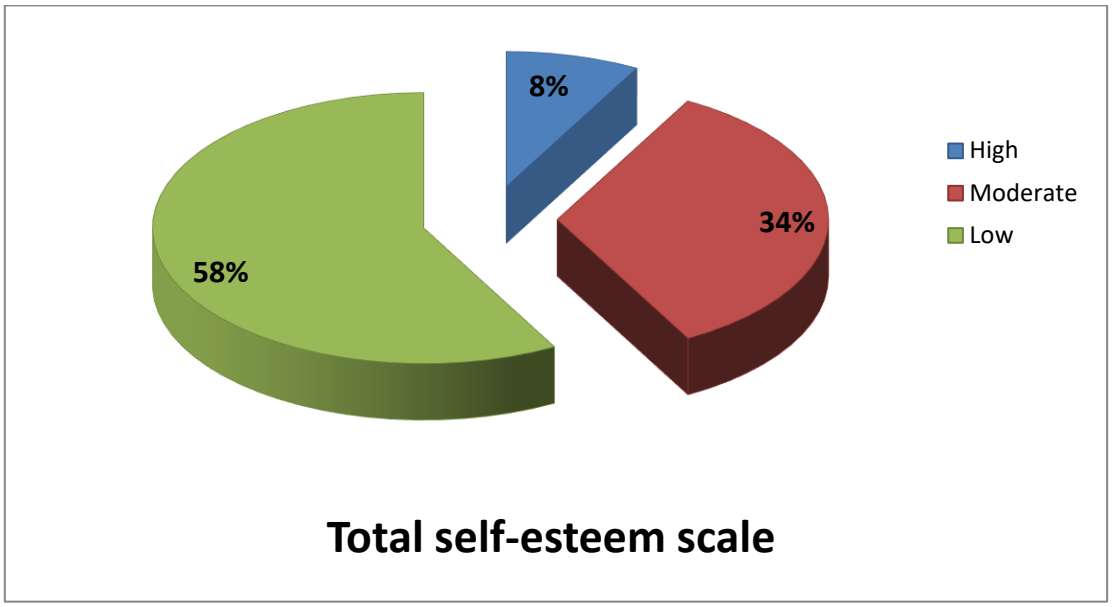

Figure (3): Percentage distribution of the studied pediatric patients with chronic renal failure according to total self-esteem (n=100).

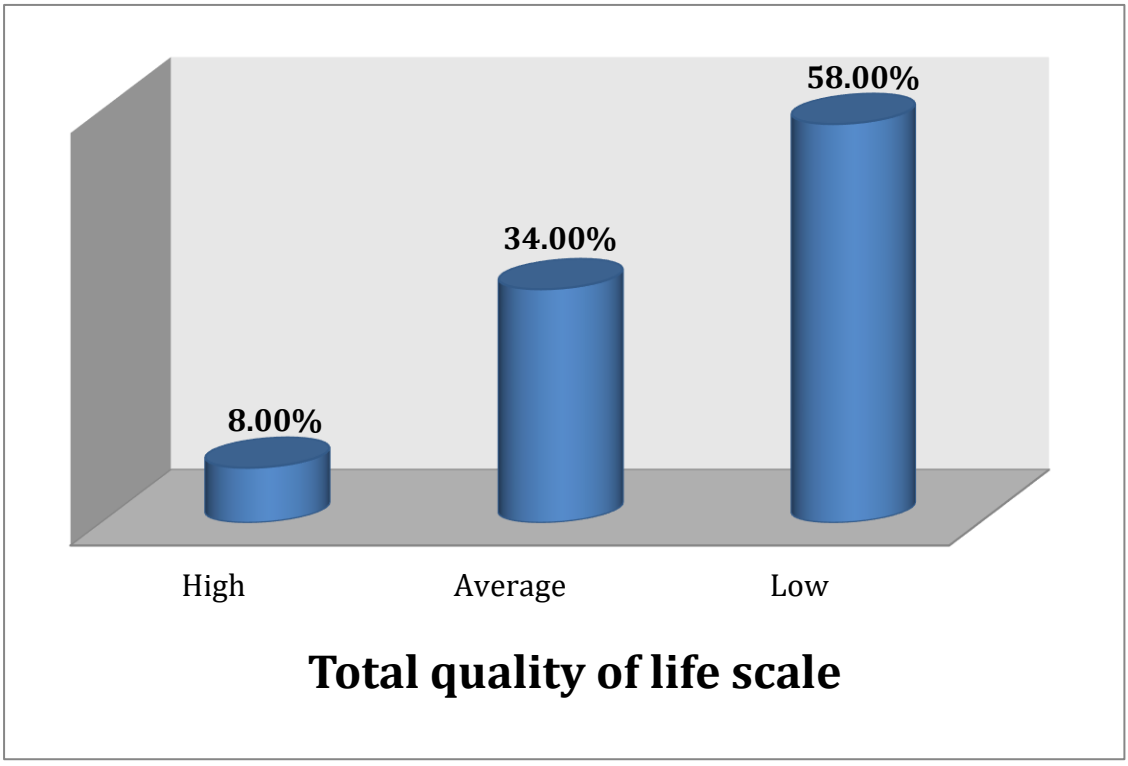

Figure (4): Percentage distribution of the studied pediatric patients with chronic renal failure according to total quality of life (n=100

Table (3): Relationship between socio-demographic characteristics of the studied pediatric patients with chronic renal failure and the total depression, anxiety and stress (n=100).

Socio-demographic Characteristics		Studied children (n=100)							
		Total level of Depression, Anxiety and Stress						X^2	P-Value
		Mild (n=10)		Moderate (n=65)		Sever (n=25)			
		N	%	N	%	N	%		
Age	8-<10 year	8	80	13	20	0	0	7.556	**<0.05***
	10-<12 year	1	10	17	26.2	1	4		
	12- <14 year	1	10	20	30.8	3	12		
	14-<16 year	0	0	12	18.5	4	16		
	16- ≥ 18 year	0	0	3	4.6	17	68		
Sex	Male	2	20	47	72.3	15	60	3.688	**<0.05***
	Female	8	80	18	27.7	10	40		
Education level	Primary school	6	60	32	49.2	2	8	14.322	**<0.01****
	Preparatory school	3	30	27	41.5	10	40		
	Secondary school	1	10	6	9.2	13	52		
Residence	Urban	4	40	13	20	6	24	1.276	>0.05
	Rural	6	60	52	80	19	76		
Number of family members	From 3 to 5 person	8	80	54	83.1	2	8	6.144	**<0.05***
	From 6 to 8 person	2	20	11	16.9	23	92		
Number of brothers and sister	One	8	80	3	4.6	0	0	2.745	**<0.05***
	Two	1	10	29	44.6	4	16		
	Three or more	1	10	33	50.8	21	84		
Ranking among the sisters and brothers	First	2	20	25	38.5	7	28	1.078	>0.05
	Second	3	30	15	23.1	9	36		
	Third	3	30	20	30.8	6	24		
	Last	2	20	5	7.7	3	12		
Family monthly income	Enough	4	40	51	78.5	2	8	9.687	**<0.01****
	Not enough	0	0	13	20	23	92		
	Enough and increase	6	60	1	1.5	0	0		

***Significant at p ‹0.05. **Highly significant at p ‹0.01. Not significant at p>0.05**

Table (4): Relationship between socio-demographic characteristics of the studied pediatric patients with chronic renal failure and the total self-esteem (n=100).

Socio-demographic Characteristics		Studied children(n=100)							
		Total Self-Esteem						X^2	P-Value
		High (n=8)		Moderate (n=34)		Low (n=58)			
		N	%	N	%	N	%		
Age	8-<10 year	3	37.5	16	47.1	2	3.4	16.052	**<0.01****
	10-<12 year	2	25	12	35.3	5	8.6		
	12- <14 year	2	25	1	2.9	21	36.2		
	14-<16 year	1	12.5	2	5.9	13	22.4		
	16- ≥ 18 year	0	0	3	8.8	17	29.3		
Sex	Male	5	62.5	20	58.8	39	67.2	3.201	>0.05
	Female	3	37.5	14	41.2	19	32.8		
Education level	Primary school	5	62.5	26	76.5	9	15.5	15.997	**<0.01****
	Preparatory school	3	37.5	4	11.8	33	56.9		
	Secondary school	0	0	4	11.8	16	27.6		
Residence	Urban	3	37.5	12	35.3	8	13.8	2.604	>0.05
	Rural	5	62.5	22	64.7	50	86.2		
Number of family members	From 3 to 5 person	6	75	24	70.6	34	58.6	2.911	>0.05
	From 6 to 8 person	2	25	10	29.4	24	41.4		
Number of brothers and sister	One	2	25	8	23.5	1	1.7	2.369	>0.05
	Two	2	25	11	32.4	21	36.2		
	Three or more	4	50	15	44.1	36	62.1		
Ranking among the sisters and brothers	First	3	37.5	14	41.2	17	29.3	1.064	>0.05
	Second	2	25	1	2.9	24	41.4		
	Third	2	25	16	47.1	11	18.9		
	Last	1	12.5	3	8.8	6	10.3		
Family monthly income	Enough	2	25	27	79.4	28	48.3	8.671	**<0.05***
	Not enough	0	0	6	17.6	30	51.7		
	Enough and increase	6	75	1	2.9	0	0		

***Significant at p ‹0.05. **Highly significant at p ‹0.01. Not significant at p>0.05**

Table (5): Relationship between socio-demographic characteristics of the studied pediatric patients with chronic renal failure and the total quality of life (n=100).

Socio-demographic Characteristics		Studied children (n=100)							
		Total level of quality of life						X^2	P-Value
		High (n=8)		Average (n=34)		Low (n=58)			
		N	%	N	%	N	%		
Age	8-<10 year	7	70	12	38.7	2	3.4	6.122	**<0.05***
	10-<12 year	1	30	8	25.8	11	18.6		
	12- <14 year	0	0	6	9.7	20	33.9		
	14-<16 year	0	0	5	16.1	11	18.6		
	16- ≥18 year	0	0	3	9.7	14	27.1		
Sex	Male	6	60	18	58.1	40	67.8	1.233	>0.05
	Female	4	40	13	41.9	19	32.2		
Education level	Primary school	6	60	17	54.8	17	28.8	19.120	**<0.01****
	Preparatory school	3	30	9	29	28	47.5		
	Secondary school	1	10	5	16.2	14	23.7		
Residence	Urban	3	30	8	25.8	12	20.3	1.432	>0.05
	Rural	7	70	23	74.2	47	79.7		
Number of family members	From 3 to 5 person	7	70	25	80.6	22	37.3	5.324	**<0.05***
	From 6 to 8 person	3	30	6	19.4	27	45.7		
Number of brothers and sister	One	2	20	3	9.7	6	10.2	1.432	>0.05
	Two	4	40	15	48.4	15	25.4		
	Three or more	4	40	13	41.9	38	64.4		
Ranking among the sisters and brothers	First	3	30	15	48.4	16	27.1	.622	>0.05
	Second	2	20	7	22.6	18	30.5		
	Third	3	30	6	19.4	20	33.9		
	Last	2	20	3	9.7	5	8.5		
Family monthly income	Enough	4	40	30	96.8	23	38.9	5.328	**<0.05***
	Not enough	1	10	0	0	35	59.4		
	Enough and increase	5	50	1	3.2	1	1.7		

***Significant at p ‹0.05. **Highly significant at p ‹0.01. Not significant at p>0.05**

Table (6): Relationship between clinical data of the studied pediatric patients with chronic renal failure and the total depression, anxiety and stress (n=100).

Clinical Data		Studied children (n=100)						X^2	P-Value
		Total level of Depression, Anxiety and Stress							
		Mild (n=10)		Moderate (n=65)		Sever (n=25)			
		N	%	N	%	N	%		
Age of onset of the disease	8-<10 years old	0	0	23	35.4	14	56	6.078	**<0.05***
	10-<12 years old	0	0	19	29.2	4	16		
	12-<14 years old	1	10	6	9.2	3	12		
	14-<16 years old	3	30	6	9.2	3	12		
	16-≥18 years old	6	60	11	16.9	1	4		
Duration of suffering from kidney failure	1-<3 years	0	0	14	21.5	15	60	12.907	**<0.01****
	3-<5 years	2	20	21	32.3	7	28		
	5-<7 years	3	30	28	43.1	3	12		
	7years or more	5	50	2	3.1	0	0		
Number of hemodialysis sessions per week	2	6	60	4	6.2	0	0	5.998	**<0.05***
	3	3	30	61	93.8	20	80		
	4	1	10	0	0	5	20		
Hemodialysis process is	Comfortable	5	50	0	0	0	0	7.004	**<0.05***
	Not comfortable	5	50	57	87.7	3	12		
	Very tired and possible complications	0	0	8	12.3	22	88		
Having any other chronic diseases	Yes	0	0	2	3.1	13	52	6.002	>0.05
	No	10	10	63	96.9	12	48		
Family members suffering from the same disease	Yes	4	40	28	43.1	8	32	1.086	>0.05
	No	6	60	37	56.9	17	68		

***Significant at p ‹0.05. **Highly significant at p ‹0.01. Not significant at p>0.05**

Table (7): Relationship between clinical data of the studied pediatric patients with chronic renal failure and the total self –esteem (n=100).

Clinical Data		Studied children (n=100)							
		Total level of Self-Esteem						X^2	P-Value
		High (n=8)		Moderate (n=34)		Low 58 (n=58)			
		N	%	N	%	N	%		
Age of onset of the disease	8-<10 years old	3	37.5	14	41.2	20	34.5	1.001	>0.05
	10-<12 years old	2	25	7	20.6	14	24.1		
	12-<14 years old	1	12.5	4	11.8	5	8.6		
	14-<16 years old	1	12.5	3	8.8	8	13.8		
	16-≥18 years old	1	12.5	6	17.6	11	19		
Duration of suffering from kidney failure	1-<3 years	2	25	7	20.6	20	34.5	1.304	**<0.05***
	3-<5 years	2	25	10	29.4	18	31		
	5-<7 years	3	37.5	15	44.1	16	27.6		
	7-≥18 years	1	12.5	2	5.9	4	6.9		
Number of hemodialysis sessions per week	2	6	75	3	8.8	1	1.7	5.098	**<0.05***
	3	2	25	29	85.3	53	91.4		
	4	0	0	2	5.9	4	6.9		
Hemodialysis process	Comfortable	1	12.5	3	8.8	1	1.7	1.276	>0.05
	Not comfortable	5	62.5	21	61.8	39	67.2		
	Very tired and possible complications	2	25	10	29.4	18	31.1		
Having any other chronic diseases	Yes	0	0	3	8.8	12	20.7	6.999	**<0.05***
	No	8	100	31	91.2	46	79.3		
Family members suffering from the same disease	Yes	3	37.5	14	41.2	23	39.7	1.005	>0.05
	No	5	62.5	20	58.8	35	60.3		

***Significant at p ‹0.05. Not significant at p>0.05**

Table (8): Relationship between clinical data of the studied pediatric patients with chronic renal failure and the total quality of life (n=100).

Clinical Data		Studied children (n=100)						X^2	P-Value
		Total level of quality of life							
		High (n=8)		Average (n=34)		Low (n=58)			
		N	%	N	%	N	%		
Age of onset of the disease	8-<10 years	2	20	6	19.4	29	49.1	2.790	>0.05
	10-<12 years	2	20	10	32.3	11	18.6		
	12-<14 years	2	20	4	12.9	4	6.8		
	14-<16 years	2	20	5	16.1	0	0.0		
	16-≥18 years	0	0	9	23.3	10	16.9		
Duration of suffering from kidney failure	1-<3 years	3	30	12	38.7	18	32.7	1.033	**<0.05***
	3-<5 years	0	0	7	22.6	20	33.7		
	5-<7 years	4	40	10	32.3	20	33.6		
	7 years or more	1	10	5	16.1	0	0.0		
Number of hemodialysis sessions per week	2	7	70	3	9.7	0	0	7.323	**<0.05***
	3	0	0	28	90.3	58	100.0		
	4	1	10	3	9.7	0	0.0		
Hemodialysis process is	Comfortable	4	40	4	12.9	4	3.00	6.4322	**<0.05***
	Not comfortable	4	40	20	64.5	41	69.5		
	Very tired and possible complications	0	0	10	32.3	13	27.5		
Having any other chronic diseases	Yes	1	10	6	9.7	11	20.3	8.112	**<0.05***
	No	7	90	28	90.3	47	79.7		
Family members suffering from the same disease	Yes	2	20	10	22.6	35	52.5	7.441	>0.05
	No	6	80	24	77.4	23	47.5		

***Significant at p <0.05. Not significant at p>0.05**

Table (9): Correlation between total depression, anxiety and stress (DASS), total self-esteem and total quality of life scales among the studied pediatric patients with chronic renal failure (n= 100).

Variables	R.	P. value
Total DASS and total self-esteem	**-0.454**	**0.001****
Total DASS and total quality of life	**-0.673**	**0.001****
Total self-esteem and total quality of life	**0.544**	**0.001****

(**) highly statistically significant at p<0.01.

Discussion:

Pediatric patients with chronic renal failure and undergoing Hemodialysis usually suffer from depression, anxiety and stress due to the radical serious changes to their personal life style such as chronic symptoms, continuous pain, and persistent fear of death. Living with such psychological problems is likely to have a negative impact on self-esteem and all domains of quality of life among these children **Oktarina & Sulistiawan, (2020)**. So, this study was conducted to assess the correlation between psychological problems, self-esteem and quality of life among children with chronic renal failure.

Concerning the socio-demographic characteristics of the studied pediatric patients, the present study results reported that, nearly one quarter of them were aged from 12 -<14 year with the mean age was 12.3 with SD ± 1.56 years. From the researchers' point of view, this result could be due to many studies reported that the epidemiology of chronic renal failure among the children more commonly above 10 years. This result was parallel with the study of **Biosci et al., (2020)** reflected that one quarter of his studied sample were aged 12-15 years old with mean age was 12.73 ±1.85 years.

As regard to sex of the studied children, the current study finding revealed that, more than two thirds of the studied pediatric patients were males. From the researchers' point of view, this might be due to several researches explained that chronic renal disease affected males more than females. This result was consistent with the study of **Elzakzouk et al., (2021)** who showed that nearly two thirds of his studied sample was males. On the other hand, this result was inconsistent with **Fayed et al., (2021)** illustrated that more than half of his studied sample was females. In addition, **El-Baroudy et al., (2020)** mentioned that more than half of his both control and study group of children were females.

Concerning level of education, the current study result stated that nearly half of the studied pediatric patients were at primary and preparatory school. From the researchers' point of view, this finding could be due to more than half of the studied children were aged from (8-14) years and this the age of primary and secondary school. This result was went in the same line with the study of **Murray et al., (2021)** reported that half of his studied sample were at primary and secondary schools.

Regarding residence, the current study findings illustrated that more than three quarters of the studied pediatric patients were living at rural areas. From the researchers' point of view, this finding might be due to children who living in rural areas were more exposure to chronic renal failure due to many factors such as water pollution. As well as, this study was conducted at Benha university hospital that serves many rural areas. This finding was in agreement with **McClellan et al., (2021)** explained that more than three quarters of his studied sample were living at rural areas. On contrast, this result was contradicted with the study of **Clave et al., (2020)** who reported that more than half of his study sample undergoing hemodialysis was living in the urban areas.

The present study results presented that more than one third of the studied pediatric patients with chronic renal failure were first ranking among their brothers and sisters. These findings were approved with **Heydari et al.**, **(2022)** showed that, more than one thirds of his studied sample was ranking the first. Furthermore, the current study finding revealed that more than half of the studied children mentioned their families didn't have enough income. From the researchers' point of view, this finding might be due to chronicity of the disease that require continuous treatment and follow up which necessitate more money. This result went in the same line with **Bello et al. (2021)** stated that more than half of the families of his studied sample didn't have enough income.

Concerning clinical data of the studied pediatric patients, the current study result approved that more than one third of the studied pediatric patients were aged from 8-<10 years at onset of the disease. More than one third of them suffered from kidney failure for 5-<7 years. Regarding number of hemodialysis sessions per week, more than three quarters of the studied children had three sessions per week. From the researchers' point of view, this finding attributed to the nature of chronic renal failure which treated by long life hemodialysis to expel waste products and poisons from the body to save the life of the affected children. These results were supported with **Ahmed et al., (2021)** mentioned that nearly half of his studied sample suffered from renal failure for more than five years and the majority of them had three times hemodialysis sessions per week.

The current study results reflected that, nearly two thirds of the studied pediatric patients mentioned that hemodialysis process is uncomfortable process. From the researchers' point of view, this result might be due to the long life hemodialysis which causes disability and limits their everyday activities. This result was parallel with **Clave et al., (2021)** presented that more than half of his studied samples were uncomfortable with the process of hemodialysis.

The present study finding explained more than three quarters of studied pediatric patients stated not having any other chronic disease. These results were in the same line with **Preka et al., (2021)** showed that the majority of his studied sample didn't complain from any other chronic disease. As well as, the current study result illustrated that nearly two thirds of the studied children reported not having any family member suffering from chronic renal failure. From the researchers' point of view, this result attributed to renal failure disease caused by many environmental factors rather than genetic factors.

Regarding total depression, anxiety and stress subscales among the studied pediatric patients, the current study findings revealed that more than half of the studied pediatric patients had moderate level of depression, anxiety while more than two thirds of them have

moderate level of stress. From the researchers` point of view, these findings might be due to pediatric patients, undergoing hemodialysis face many worries concerning their own health and the perception of their limitations such as food and fluid restrictions. In addition, changes in their bodily appearance, inability to complete educational programs and meet educational goals, unsupportive relationships with friends, dependency on hemodialysis machine long-life. Which reflect negatively on their psychological well-being.

These findings were in the same line with the study of **Patel et al., (2021)** explained that more than half of his studied sample had moderate level of depression and anxiety, nearly two thirds of them had moderate level of stress. On other hand, these results were inconsistent with the study of **Musa et al., (2021)** represented that only one third of his studied children have moderate level of depression, anxiety and stress.

As regard to total depression, anxiety and stress scale among the studied pediatric patients, the present study results approved that nearly two thirds of the studied pediatric patients, had moderate level of depression, anxiety and stress. From the researchers point of view, these finding could be due to many factors such as frequent hospitalizations, food and fluid restrictions, changes in bodily appearance, unsupportive relationships with friends, fear about the future and fear of death at any time which alter their psychological well-being and causes many psychological problems such as anxiety, depression and stress. These finding were supported with **Rasheed et al., (2021)** reflected that less than two thirds of his studied sample suffered from moderate level of stress, anxiety and depression. Furthermore, **Gadia et al., (2022)** revealed that depression, anxiety and stress are highly prevalent among more than half of his studied hemodialysis sample.

Concerning total self-esteem among the studied pediatric patients, the current study finding stated that, more than half of the studied pediatric patients had low self-esteem. These results attributed to children with chronic renal failure and undergoing hemodialysis suffered from many psychological problems which have negative effects on their self-esteem by changing their mental self-image. In addition, negative physical changes such as change the color of the skin, loss more of weight, site of fistula and other changes on children's body image lead to un-acceptance of the self and hence low self-esteem. This finding was in agreement with **Gadia et al., (2022)** illustrated that more than half of his studied sample revealed low level of their self-esteem. In addition, **Sari & Afiyanti, (2021)** mentioned that nearly two thirds of his studied sample had lower total self-esteem than healthy children. On contrast, **Dehghan et al., (2019)** reported that the mean score of total self-esteem among more than half of his studied sample with hemodialysis was high.

Regarding total quality of life among the studied pediatric patients, the present study results explained that, more than half of the studied pediatric patients had low level of quality of life. This current finding might be due to affected children face many challenges with hemodialysis with no counseling or training is provided regarding how to treat their negative feelings, how to cope with their chronic disease, and trying to preform

activities of daily living as much as possible. All of these negatively affect all domains of quality of life. These results were consistent with **Tchente et al., (2022)** reported that the overall quality of life domains were impaired among more than half of his studied sample undergoing hemodialysis.

As for relationship between socio-demographic characteristics of the studied pediatric patients with chronic renal failure and the total depression, anxiety and stress. It displays that there is a highly statistically significant relation between studied pediatric patients' total level of depression, anxiety and stress with their education level and family monthly income. From the researchers' point of view, these results could be due to low level of education leading lack of awareness among the children about the nature of their disease. Also, lack of family income cause lack access to health care needs and didn't had the ability to save all medical requirements for their children which affect negatively psychological status of their children. This finding were parallel with the study of **Gerogianni et al., (2021)** illustrated that depression, stress and anxiety were highly statistically significant associated with low level of education and poor financial status.

In addition, there is a statistically significant relation between studied pediatric patients' total level of depression, anxiety and stress scale and their socio-demographic items as age, sex, number of family members and number of brothers and sister. From the researchers' point of view, this result attributed to with small age of affected children was unable to accept their disease and cope with it as older age. Also, the number of family member who provide continuous support for their children affect their psychological status. This results were went in the same line with **Elzakzouk et al., (2021)** presented that a statistically significant relation was found between his studied sample' total level of depression, anxiety and stress with demographic data in the areas of their age, sex, number of brothers and sisters and number of family members.

The current study result explored that there was a highly statistically significant relation between studied pediatric patients' total self-esteem with their age and education level. From the researchers point of view, this result attributed to young age and young stage of education of the studied children affect their awareness and their ability to accept the serious physical changes caused by the disease which negatively affect their self-esteem. These findings were approved by **Dehghan et al., (2019)** presented that there was a positive and a highly statistically significant relationship between total self-esteem and higher education level and age among his studied sample. Furthermore, the present study findings explained that there was a statistically significant relation between studied children's total self-esteem and their family monthly income. From the researchers' point of view, this result might be due to more than half of the studied children, their families didn't had enough income to achieve their medical requirements or other life requirements which alter their self-esteem.

Concerning relationship between socio-demographic characteristics of the studied pediatric patients with chronic renal failure and the total quality of life. The current study result reflected that there was a highly statistically significant relation between studied pediatric patients' total quality of life and their educational level. In addition, there is a statistically significant relationship between studied children's total quality of life with their age, number of family members and their family monthly income. From the researchers' point of view, this result could be due to age, level of education, number of

family members of the studied children affect their ability to understand the instructions regarding rehabilitation toward their illness as well as the emotional support which help them to accept themselves and trying to perform activities of daily living as much as possible.

Regarding relationship between clinical data of the studied pediatric patients with chronic renal failure and the total depression, anxiety and stress. The present study result showed that there was a highly statistically significant relation between studied pediatric patients' total level of depression, anxiety and stress and their duration of suffering from kidney failure. In addition there is a statistically significant relation between studied pediatric patients' total level of depression, anxiety and stress and their clinical items as age of onset of the disease, number of hemodialysis sessions, and hemodialysis process. From the researchers' point of view, this result might be due to the medical condition of the affected children and presence of other medical problems have a negative effect on children's general health, appearance, level of ability which leading to disturbance at their psychological status. These results were supported with **El Deiasty, (2021)** demonstrated that a statistically significant positive relation between total stress, anxiety and depression and duration of disease, dialysis session and process among his studied sample.

As regard the relationship between clinical data of the studied pediatric patients with chronic renal failure and the total self – esteem**.** The current study result clarified that there was a statistically significant relation between studied pediatric patients' total level of self-esteem and the duration of suffering from kidney failure, the number of hemodialysis sessions and having any other chronic diseases. From the researchers' point of view, these results might be because of the stage of disease, duration of treatment and complaining of other medical diseases influence the level of self-esteem of the children. These results were supported with a study of **Saedi et al., (2021)** mentioned that there was a statistically significant relation between studied children` total self-esteem and the items of their medical data such as number of hemodialysis session and having any other chronic diseases.

As for relationship between clinical data of the studied pediatric patients with chronic renal failure and the total quality of life. The present study result revealed that there is a statistically significant relation between studied pediatric patients total level of quality of life and the duration of suffering from kidney failure, number of hemodialysis sessions per week, hemodialysis process, and having any other chronic diseases. From the researchers point of view, these results could be due to long duration of suffering from the disease, long life dependency on hemodialysis machine as well as having other chronic diseases among the affected children affected their ability to perform activities of daily living manage and hence negatively affected all domains of quality of life.

Concerning correlation between total depression, anxiety and stress (DASS), total self-esteem and total quality of life scales among the studied pediatric patients, the current study results demonstrated that there was a highly statistically significant negative correlation between total depression, anxiety and stress and total self-esteem & total quality of life scales among the studied pediatric patients, while there is a highly statistically significant positive correlation between total

self-esteem and total quality of life among them. From the researchers' point of view, this could be because of the fact that negative psychological status of affected children played an important role in decreasing the level of self-esteem and hence quality of life. But when affected children have positive psychological wellbeing their self-esteem increase, and their quality of life also increase.

On the same line, **El far & Zaki (2020)** demonstrated that there were statistically significant negative correlations between stress, anxiety, depression, self-esteem and quality of life. Also, in agreement with **Amirkhani et al., (2021)** that there were highly statistically significant positive correlations between self-esteem and quality of life among his studied sample. Finally, we can say that chronic renal failure and hemodialysis have a negative impact on children's psychological status, self-esteem and their quality of life. So, psycho-educational training program and coping strategies about how to improve their psychological status, their self-esteem and quality of life must be provided to all children with hemodialysis.

Conclusion:

There was a strong relationship between psychological problems, self-esteem and quality of life among the studied pediatric patients with chronic renal failure and undergoing hemodialysis as less than two thirds of the studied pediatric patients had moderate level of psychological problems (depression, anxiety and stress) and more than half of them had low levels of self-esteem and quality of life. Moreover, there was a highly statistically significant negative correlation between total psychological problems and total self-esteem and total quality of life scales, while there was a highly statistically significant positive correlation between total self-esteem and total quality of life scales among the studied pediatric patients.

Recommendations:

1- Psycho-educational program should be an integral part of comprehensive care for all pediatric patients undergoing hemodialysis to decrease their psychological problems and enhance their self-esteem and quality of life.
2- Counselling program should be implemented to unit's staff to raise awareness and promote the bio psychosocial approach to the disease and the affected children.
3- Implementation non-pharmacological alternative therapies for children; as muscle relaxation, meditation, music therapy, massage therapy and reflexology to enhance their coping pattern toward their illness.

Further research:

Replication of the study using larger sample in different correlational settings to generalize the results.

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العلاقه بين المشاكل النفسيه والثقه بالنفس وجودة الحياه لدى الأطفال المصابين بالفشل الكلوى

هدى عبدالمعطى محمود – هند احمد مصطفى- ضحى عبد البصيرمحمود

يمثل مرض الفشل الكلوى المزمن بين الأطفال مشكله ذات خطورة عالية حيث تتسبب فى الكثير من الآثار السلبيه ليس فقط آثار جسديه ولكن أيضا آثار نفسيه والتى بدورها تنعكس سلبا على الثقه بالنفس ومن ثم جودة الحياه لديهم.وهدفت هذه الدراسه إلى تقييم العلاقه بين المشاكل النفسيه والثقه بالنفس وجودة الحياه لدى الأطفال المصابين بالفشل الكلوى. حيث تم إستخدام تصميم وصفى لإجراء هذه الدراسه.وأجريت الدراسه بوحدة الغسيل الكلوى للأطفال بمستشفى بنها الجامعى بمدينه بنها بمحافظه القليوبيه والتابعه لوزارة التعليم العالى . وتم تطبيق هذه الدراسه على عينه غرضيه مكونه من عدد (100) من الأطفال الخاضعين للغسيل الكلوى من المكان المذكور أعلاه.وتم إجراء هذه الدراسه بإستخدام الأدوات التاليه : الأداة الأولى إستمارة إستبيان مصممه للمقابله الشخصيه والأداة الثانيه مقياس الاكتئاب والقلق والضغط النفسى والأداة الثالثه مقياس تقدير الذات والأداة الرابعه مقياس جودة الحياه.وأبرزت نتائج هذه الدراسه عن أن أقل من ثلثى الأطفال الخاضعين للدراسه لديهم مستوى متوسط من المشاكل النفسيه المتمثله فى (القلق والاكتئاب والضغط النفسى) وأن أكثر من نصفهم يعانون من مستوى منخفض من الثقه بالنفس وجودة الحياه. كما أستنتج من هذه الدراسه وجود علاقه إرتباطيه سلبيه ذات دلاله إحصائيه قويه بين المشاكل النفسيه والثقه بالنفس وجودة الحياه لدى الاطفال الخاضعين للدراسه كما توجد أيضا علاقه إرتباطيه إيجابيه ذات دلاله إحصائيه قويه بين الثقه بالنفس وجودة الحياه لديهم. حيث أوصت هذه الدراسه بضرورة تطبيق برنامج تعليمى نفسى كجزء أساسى وحيوى من الرعايه التمريضيه المقدمه لهؤلاء الأطفال للحد من المشاكل النفسيه ومن ثم تحسين الثقه بالنفس وجودة الحياه لديهم.