

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

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Abstract

Background: Children with chronic renal failure are considered to have a significant problem that affect on their quality of life and self-esteem negatively due to several physical and psychological changes. **Aim:** 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 used in this study. **Setting:** Conduction of study 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 included in the study. **Tools:** Tool (1): A structured Interviewing Questionnaire Sheet, Tool (2): Depression, Anxiety and Stress Scale (DASS), Tool (3): Rosenberg Self-Esteem Scale: and Tool (4): 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:** There was a highly statistically significant positive correlation between total of self-esteem and quality of life scales, as well as a highly statistically significant negative correlation between total of psychological problems , self-esteem and quality of life scales. **Recommendation:** All children with chronic renal failure should receive a psycho-educational program as important part of their comprehensive care to reduce their psychological problems while improving 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 illness that triggered by structural abnormalities and/or irreversible loss of kidney functions for more than three months. Since children typically do not exhibit symptoms until a significant malfunction appears, it is regarded as a silent pathology. for all pediatric patients with chronic renal insufficiency, hemodialysis is thought to be the most popular and frequent course of treatment. Hemodialysis is a technique that permits blood to flow through semi-permeable membrane. To excess water,

bodily waste, and toxic substances then eliminated from the blood by the filter. The procedure clear the blood, keeps the body's homeostatic environment, and helps to controls normal blood pressure by maintaining the body's appropriate fluid and electrolyte balance (Shroff et al., 2021).

Pediatric patients 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 arise from being constantly ill or in the hospital, un supportive or

poor relationships with friends , family and community, dependence on hemodialysis machines, and uncertainty about the future. These factors may increase the severity of the causing physical illness by, decreasing immune functions and disturbing cardiac and nervous system **(Bouali et al., 2021)**.

Self-esteem is a general evaluation of children's worth that can be expressed either positively or negatively. Additionally, self-esteem among pediatric patients undergoing hemodialysis refers to psychological well-being and how the child is feeling satisfied with life and affections on the body . This is reflected in the child's stable emotional responses over time, also acceptance of self-image, as well as in the adaptation of processes arising from life cycle and social relationships **(García et al., 2021)**.

Additionally, children with renal failure who are receiving hemodialysis always have low self-esteem due to a variety of factors, including chronic pain, exhaustion, hemodialysis complications, various physical changes in their bodies. Also ,the child feel isolated, lose confidence , fear rejection by others, deteriorate self-care routines, and constantly feel hopeless, anxious, and depressed as a result of these changes in the body image **(Oyekcin et al., 2021)**.

Quality of life is a collaboration of one's bodily, social, psychological, and spiritual well-being. Long-term or short-term, pediatric patients with chronic renal failure typically have poor quality of life because are likely to become extremely dependent on others for many aspects of their daily activities, which would impact their social network and familial relationships. Furthermore, all aspects of quality of life are adversely affected by persistent pain, low self-esteem, decline self-efficacy and negative body image **(Coelho & Martins,**

2020).

Finally, Probability association between self-esteem, psychological problems, and quality of life among pediatric patients undergoing hemodialysis is high. because the decline in self-esteem and quality of life is probably a direct result of their elevated stress and anxiety levels leading depression. Therefore, it becomes essential for psychiatric mental health nurses to determine pediatric patients holistically in order to recognize these major psychological problems which may affect of their self-esteem and quality of life **(Marthoenis et al., 2021)**.

Physical, mental, and social well-being of children is also referred to their quality of life .So that hemodialysis procedures, long-term pharmaceutical requirements and frequent hospital stays may all worsen psychological problems in children and negatively impact their quality of life and self-esteem. hemodialysis can also interfere with social and physical activity levels and life satisfaction. leading to loss of pleasure in everyday activities **(Ahmed et al., 2020)**.

Children receiving hemodialysis require mental assistance in order to help them in dealing their current situation, and nurses provide much support by lowering anxiety, improving adaptability, and providing proper education related their condition with close emotional support and information **(Amutha, 2021)**.

In addition, a psychiatric and mental health nurse should find out what coping techniques children are presently using, how they coped with stress, anxiety, and depression, and how they intend to handle the stresses related to dialysis. Nurses are able to recognize the unique needs of each child , help setting goals by using effective communication skills. Furthermore, caregivers must carefully listen to children's struggles in a nonjudgmental and noncritical way and consistently reassure them **(Nobogan, 2020)**.

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

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, undesirable body image or psychological conditions such stress, anxiety, and depression that had a negative effect on their quality of life and self-esteem (**Chanchlani et al., 2021**). In Egypt, the World Health Organization (WHO) declares 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**). Regarding Benha University Hospital statistical data records show that the number of children (aged 8-18 years) undergoing hemodialysis and admitted to hemodialysis unit was (245) cases in 2023. Psychological changes can causing a negative effect on social life, physical health and all aspects of quality of life. Therefore, from the necessary of the researchers carry out this research study to assess the correlation between psychological problems, self-esteem and quality of life among children with chronic renal failure.

Aim of the study:

The 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?
- 2- 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 used to achieve the aim of this study.

Setting: The current study was carried out 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:

A sample size has been determined by using the following equation: $n = (z^2 \times p \times q) / D^2$ At power 80% and CI 95%, which based on the previous review of literature that evaluated the same finding and detected significant differences. sample size is 100 from 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 capable of verbal communication
- Willingness to participate in the study.

Exclusion criteria:

- Children below eight years.

- Children with a history of psychotic symptoms & neurological conditions.
- Children with hearing and vision impairments.

Tools of Data Collection:

Four tools were utilized for collecting data.

Tool (1): A Structured Interviewing Questionnaire Sheet:

It was designed by the researchers to accomplish the goal of the current study and it consists of 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 that included (age at the disease onset, duration for 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 (2): Depression, Anxiety and Stress Scale (DASS):

DASS was developed by **Lovibond, S. & Lovibond, P., (1995)**, and adapted by the researchers. It was used to assess psychological problems among children undergoing hemodialysis and consisted of 21 items, 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 21 and 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 (3): Rosenberg Self-Esteem Scale:

This scale was originally developed by **Rosenberg (1965)**, adapted by the researchers. It 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 (4): Quality of Life Scale:

The scale was developed by **WHO, (2014)**, also adapted by researchers. In which used to assess the level of quality of life among children with chronic renal failure and

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

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 categorize into 3 levels:**

- 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:

Administrative approval:

The researchers was obtained an official permissions letter to the director of Benha university hospital with the aim of the study and sheet of study tools to facilitate the collection of data. This done after having consent from the dean of Faculty of Nursing, Benha University.

Validity:

Content validity of the study tools checked for trust and worthiness before data collection to ensure achieve their criteria.

In the field of psychiatric and mental health nursing which that five professionals were evaluated the content validity, some modifications was done, such as rearranging some sentences at the self-esteem scale and quality of life scale, modifying the Arabic translation, and rephrasing some sentences at the DASS scale.

Reliability:

The researchers evaluated reliability to verify the tools' internal consistency by giving the study tools to the same sample under similar conditions on multiple occasions. Alpha Cronbach reliability was used to compare responses from multiple tests (Test-re-Test reliability). At 0.91 for the DASS scale, 0.94 for the self-esteem scale, and 0.93 for the quality of life scale, the tools of study exhibited strong reliability.

Ethical considerations:

- An official approval was provided by the Ethical Committee of Scientific Research at the Faculty of Nursing, Benha University (**REC.PSYN.P26, 11-2-2024**).
- Approvals from studied children with chronic renal failure and undergoing hemodialysis were obtained after explaining the aim of the study and before data collection.
- Anonymity was guaranteed as the completed questionnaires were assigned a code number (not using names).
- The studied children involved in the study were assured that the questionnaire sheet would be utilized for research purposes only and disposed it after the completion of this study.
- The study procedures do not caused any harmful effects on studied children.
- The studied children informed about having the right to withdraw from the study at any time.

A Pilot study:

A pilot study was carried out on 10 from children with chronic renal failure who were receiving hemodialysis, it estimated 10% of the total sample. In order to assess the tools' applicability, clarity, and reliability ,Later on, this sample was excluded from the actual study sample.

The results of the pilot study:

Following the pilot study's completion, it has been found that:

- (1) The tools were applicable and clear; however, some statements were rephrased, rearranged, and retranslated to make them simpler and easier to understand for the children under study .
- (2) The tools were valid and relevant.
- (3) No problems were interfering with the data collection
- (4) After finishing pilot study the tools becomes suitable for studied children .

Field work:

The actual fieldwork used in the data collection process has taken nearly three months started from beginning of March 2024 to the end of May 2024.The researchers collected the data from studied children 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. At the beginning of interview the researchers greeted the studied children, introduced themselves to each child, give a brief introduction and outlined the study's objectives also obtained their oral agreement, finally completed the interview questionnaire that used for data collection.

Statistical analysis:

The statistical package for social science (SPSS) version (20) and the Microsoft Excel

program were used to perform the statistical analysis of the data. Descriptive statistics, such as frequencies and percentages for categorical data and the arithmetic mean (X) and standard deviation (SD) for quantitative data, were used to present the data. The chi square test (X) * P-value was used to compare qualitative variables, and the R-test was used to determine 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 socio- demographic characteristics of the studied pediatric patients with chronic renal failure. Which that nearly one quarter (24.0%) 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% & 45.0% 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 (60.0%) of the studied pediatric patients mentioned their families don't have enough income.

Table (2): shows percentage distribution of clinical data of the studied pediatric patients with chronic renal failure. In which 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 as, 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

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

(85.0%) of them demonstrated not having any other chronic disease. Moreover, nearly two thirds (65.0%) 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. Which that more than two thirds of the studied pediatric patients have moderate level of stress (68.0%). While more than half of them have moderate level of depression and anxiety (58.0% & 60.0% respectively).

Figure (2): demonstrates percentage distribution of total depression, anxiety and stress scale among the studied pediatric patients with chronic renal failure. When there is 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 total self-esteem among the studied pediatric patients with chronic renal failure. Which 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 total quality of life among the studied pediatric patients with chronic renal failure. Which 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 and the total depression, anxiety and stress among the studied pediatric patients with chronic renal failure. That there is a highly statistically significant relation between total level of depression, anxiety and stress of studied pediatric patients' and their education level and family monthly income at ($P\text{-value} < 0.01^{**}$). In addition, there is a statistically significant relation between total level of depression, anxiety and stress scale among studied children and their socio-demographic items as age, sex, number of family members and number of brothers and sister at ($P\text{-value} < 0.05^{*}$).

Table (4): reflects relationship between socio-demographic characteristics and total self-esteem among the studied pediatric patients with chronic renal failure. Which there is a highly statistically significant relation between total self-esteem among the studied pediatric patients and their age and education level at ($P\text{-value} < 0.01^{**}$). Furthermore, there is a statistically significant relation between studied children's total self-esteem and their family monthly income at ($P\text{-value} < 0.05^{*}$).

Table (5): demonstrates relationship between socio-demographic characteristics and total quality of life among the studied pediatric patients with chronic renal failure. While there is a highly statistically significant relation between total quality of life among studied pediatric patients and their educational level at ($P\text{-value} < 0.01^{**}$). As well as, there is a statistically significant relationship between total quality of life among studied children and their age, number of family members and their family monthly income at ($P\text{-value} < 0.05^{*}$).

Table (6): explains relationship between clinical data and total depression, anxiety and stress among the studied pediatric patients with chronic renal failure. Which that a highly statistically significant relation between total level of depression, anxiety and stress among

studied pediatric patients and their duration of suffering from kidney failure at (P- value $<0.01^{**}$). In addition there is a statistically significant relation between total level of depression, anxiety and stress and among the studied children and their clinical data 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 and total self –esteem among the studied pediatric patients with chronic renal failure. In which that a statistically significant relation between total level of self-esteem among the studied pediatric patients 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 and the total quality of life among the studied pediatric patients with chronic renal failure. That there is a statistically significant relation between total level of quality of life among the studied pediatric patients and their 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. Which 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 $< 0.001^{**}$).

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

Table (1): Percentage distribution of socio-demographic characteristics of the studied pediatric patients with chronic renal failure (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	0.0
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 clinical data of the studied pediatric patients with chronic renal failure (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	10.0
Not comfortable	65	65.0
Very tired and possible complications can occur during the hemodialysis sessions	25	25.0
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	35.0
No	65	65.0
If the answer is yes, the degree of the relationship n=(40)		
First degree relatives	19	47.5
Second degree relatives	21	52.5

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

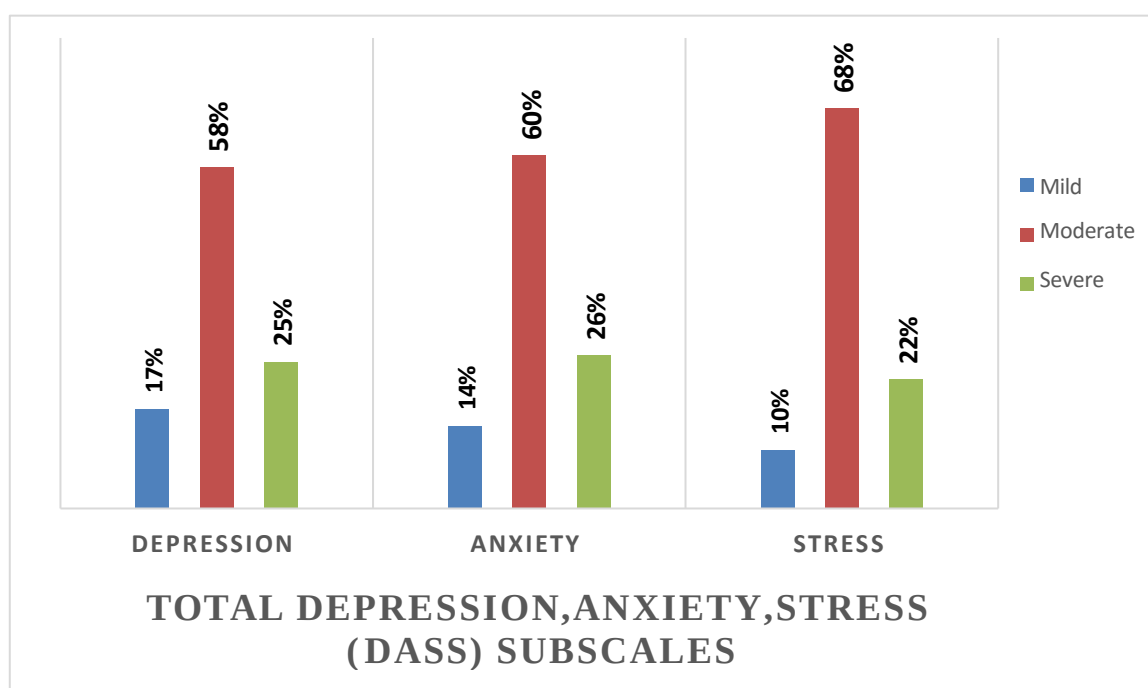


Figure (1): Percentage distribution of total depression, anxiety and stress subscales among the studied pediatric patients with chronic renal failure (n=100)

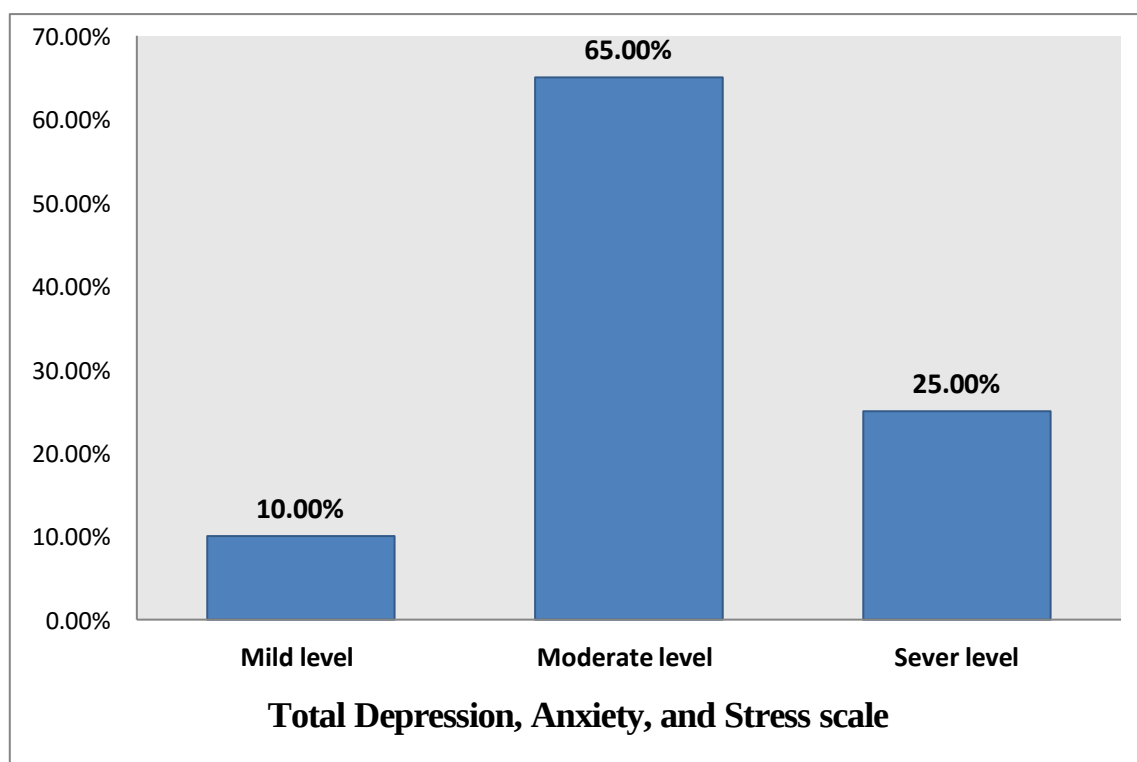


Figure (2): Percentage distribution of total depression, anxiety and stress scale among the studied pediatric patients with chronic renal failure (n=100).

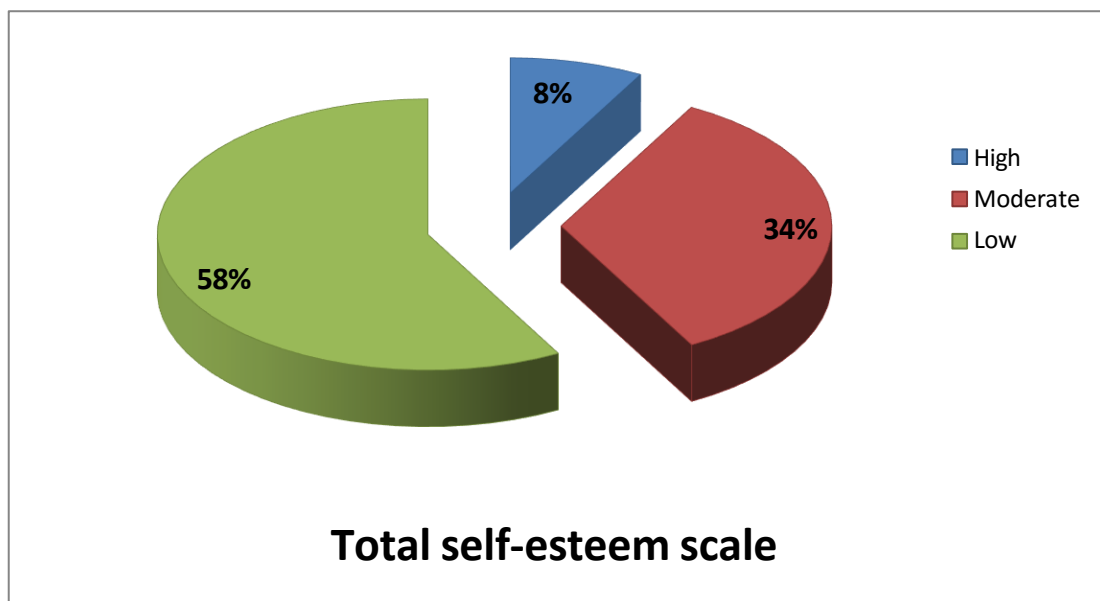


Figure (3): Percentage distribution of total self-esteem among the studied pediatric patients with chronic renal failure (n=100).

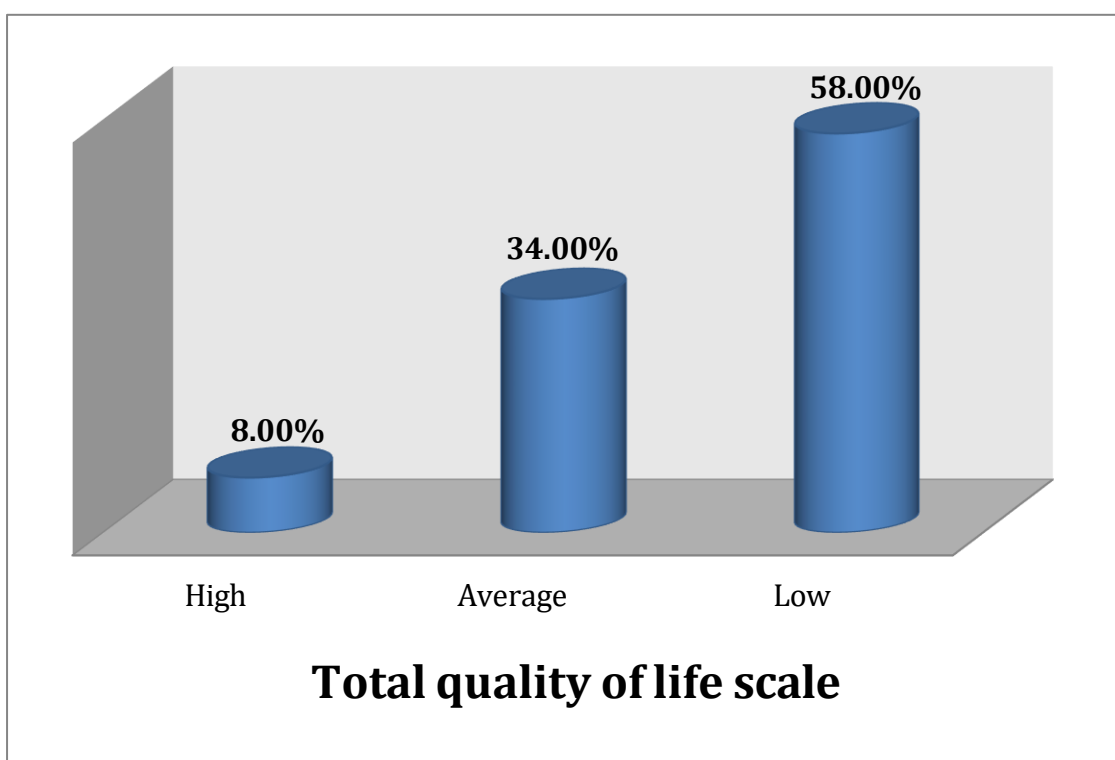


Figure (4): Percentage distribution of total quality of life among the studied pediatric patients with chronic renal failure (n=100)

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

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

Socio-demographic Characteristics		Studied children (n=100)							
		Total level of Depression, Anxiety and Stress						X ²	P-Value
		N	%	N	%	N	%		
Age	8-<10 year	8	80.0	13	20.0	0	0.0	7.556	<0.05*
	10-<12 year	1	10.0	17	26.2	1	4.0		
	12- <14 year	1	10.0	20	30.8	3	12.0		
	14-<16 year	0	0.0	12	18.5	4	16.0		
	16- ≥ 18 year	0	0.0	3	4.6	17	68.0		
Sex	Male	2	20.0	47	72.3	15	60.0	3.688	<0.05*
	Female	8	80.0	18	27.7	10	40.0		
Education level	Primary school	6	60.0	32	49.2	2	8.0	14.322	<0.01**
	Preparatory school	3	30.0	27	41.5	10	40.0		
	Secondary school	1	10.0	6	9.2	13	52.0		
Residence	Urban	4	40.0	13	20	6	24.0	1.276	>0.05
	Rural	6	60.0	52	80	19	76.0		
Number of family members	From 3 to 5 person	8	80.0	54	83.1	2	8.0	6.144	<0.05*
	From 6 to 8 person	2	20.0	11	16.9	23	92.0		
Number of brothers and sister	One	8	80.0	3	4.6	0	0.0	2.745	<0.05*
	Two	1	10.0	29	44.6	4	16.0		
	Three or more	1	10.0	33	50.8	21	84.0		
Ranking among the sisters and brothers	First	2	20.0	25	38.5	7	28.0	1.078	>0.05
	Second	3	30.0	15	23.1	9	36.0		
	Third	3	30.0	20	30.8	6	24.0		
	Last	2	20.0	5	7.7	3	12.0		
Family monthly income	Enough	4	40.0	51	78.5	2	8.0	9.687	<0.01**
	Not enough	0	0.0	13	20	23	92.0		
	Enough and increase	6	60.0	1	1.5	0	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 and total self-esteem among the studied pediatric patients with chronic renal failure (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	16.05 2	<0.01**
	10-<12 year	2	25.0	12	35.3	5	8.6		
	12- <14 year	2	25.0	1	2.9	21	36.2		
	14-<16 year	1	12.5	2	5.9	13	22.4		
	16- ≥ 18 year	0	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	15.99 7	<0.01**
	Preparatory school	3	37.5	4	11.8	33	56.9		
	Secondary school	0	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	75.0	24	70.6	34	58.6	2.911	>0.05
	From 6 to 8 person	2	25.0	10	29.4	24	41.4		
Number of brothers and sister	One	2	25.0	8	23.5	1	1.7	2.369	>0.05
	Two	2	25.0	11	32.4	21	36.2		
	Three or more	4	50.0	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	25.0	1	2.9	24	41.4		
	Third	2	25.0	16	47.1	11	18.9		
	Last	1	12.5	3	8.8	6	10.3		
Family monthly income	Enough	2	25.0	27	79.4	28	48.3	8.671	<0.05*
	Not enough	0	0.0	6	17.6	30	51.7		
	Enough and increase	6	75.0	1	2.9	0	0.0		

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

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

Table (5): Relationship between socio-demographic characteristics and total quality of life among the studied pediatric patients with chronic renal failure (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	70.0	12	38.7	2	3.4	6.122	<0.05*
	10-<12 year	1	30.0	8	25.8	11	18.6		
	12- <14 year	0	0.0	6	9.7	20	33.9		
	14-<16 year	0	0.0	5	16.1	11	18.6		
	16- ≥18 year	0	0.0	3	9.7	14	27.1		
Sex	Male	6	60.0	18	58.1	40	67.8	1.233	>0.05
	Female	4	40.0	13	41.9	19	32.2		
Education level	Primary school	6	60.0	17	54.8	17	28.8	19.120	<0.01**
	Preparatory school	3	30.0	9	29	28	47.5		
	Secondary school	1	10.0	5	16.2	14	23.7		
Residence	Urban	3	30.0	8	25.8	12	20.3	1.432	>0.05
	Rural	7	70.0	23	74.2	47	79.7		
Number of family members	From 3 to 5 person	7	70.0	25	80.6	22	37.3	5.324	<0.05*
	From 6 to 8 person	3	30.0	6	19.4	27	45.7		
Number of brothers and sister	One	2	20.0	3	9.7	6	10.2	1.432	>0.05
	Two	4	40.0	15	48.4	15	25.4		
	Three or more	4	40.0	13	41.9	38	64.4		
Ranking among the sisters and brothers	First	3	30.0	15	48.4	16	27.1	.622	>0.05
	Second	2	20.0	7	22.6	18	30.5		
	Third	3	30.0	6	19.4	20	33.9		
	Last	2	20.0	3	9.7	5	8.5		
Family monthly income	Enough	4	40.0	30	96.8	23	38.9	5.328	<0.05*
	Not enough	1	10.0	0	0.0	35	59.4		
	Enough and increase	5	50.0	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 and total depression, anxiety and stress among the studied pediatric patients with chronic renal failure (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	0.0	23	35.4	14	56.0	6.078	<0.05*
	10-<12 years old	0	0.0	19	29.2	4	16.0		
	12-<14 years old	1	10.0	6	9.2	3	12.0		
	14-<16 years old	3	30.0	6	9.2	3	12.0		
	16-≥18 years old	6	60.0	11	16.9	1	4.0		
Duration of suffering from kidney failure	1-<3 years	0	0.0	14	21.5	15	60.0	12.907	<0.01* *
	3-<5 years	2	20.0	21	32.3	7	28.0		
	5-<7 years	3	30.0	28	43.1	3	12.0		
	7years or more	5	50.0	2	3.1	0	0.0		
Number of hemodialysis sessions per week	2	6	60.0	4	6.2	0	0.0	5.998	<0.05*
	3	3	30.0	61	93.8	20	80.0		
	4	1	10.0	0	0.0	5	20.0		
Hemodialysis process is	Comfortable	5	50.0	0	0	0	0.0	7.004	<0.05*
	Not comfortable	5	50.0	57	87.7	3	12.0		
	Very tired and possible complications	0	0.0	8	12.3	22	88.0		
Having any other chronic diseases	Yes	0	0.0	2	3.1	13	52.0	6.002	>0.05
	No	10	10.0	63	96.9	12	48.0		
Family members suffering from the same disease	Yes	4	40.0	28	43.1	8	32.0	1.086	>0.05
	No	6	60.0	37	56.9	17	68.0		

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

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

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

Clinical Data		Studied children (n=100)							
		Total level of Self-Esteem							
		High (n=8)		Moderate (n=34)		Low 58 (n=58)		X ²	P-Value
		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	19.0		
Duration of suffering from kidney failure	1-<3 years	2	25.0	7	20.6	20	34.5	1.304	<0.05*
	3-<5 years	2	25.0	10	29.4	18	31.0		
	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	75.0	3	8.8	1	1.7	5.098	<0.05*
	3	2	25.0	29	85.3	53	91.4		
	4	0	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	0.0	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 and total quality of life among the studied pediatric patients with chronic renal failure (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	20.0	6	19.4	29	49.1	2.790	>0.05
	10-<12 years	2	20.0	10	32.3	11	18.6		
	12-<14 years	2	20.0	4	12.9	4	6.8		
	14-<16 years	2	20.0	5	16.1	0	0.0		
	16-≥18 years	0	0.0	9	23.3	10	16.9		
Duration of suffering from kidney failure	1-<3 years	3	30.0	12	38.7	18	32.7	1.033	<0.05*
	3-<5 years	0	0.0	7	22.6	20	33.7		
	5-<7 years	4	40.0	10	32.3	20	33.6		
	7 years or more	1	10.0	5	16.1	0	0.0		
Number of hemodialysis sessions per week	2	7	70.0	3	9.7	0	0.0	7.323	<0.05*
	3	0	0.0	28	90.3	58	100.0		
	4	1	10.0	3	9.7	0	0.0		
Hemodialysis process is	Comfortable	4	40.0	4	12.9	4	3.00	6.4322	<0.05*
	Not comfortable	4	40.0	20	64.5	41	69.5		
	Very tired and possible complications	0	0.0	10	32.3	13	27.5		
Having any other chronic diseases	Yes	1	10.0	6	9.7	11	20.3	8.112	<0.05*
	No	7	90.0	28	90.3	47	79.7		
Family members suffering from the same disease	Yes	2	20.0	10	22.6	35	52.5	7.441	>0.05
	No	6	80.0	24	77.4	23	47.5		

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

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

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, anxiety stress and depression 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 affect on self-esteem by a negative way and all quality of life domains among these children **Oktarina & Sulistiawan, (2020)**.

Concerning the characteristics of socio-demographic data among 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 $\pm$ 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.

Regarding to sex of the studied children, the current study finding revealed that, more than two thirds of the studied pediatric patients were males. According to the point view of researchers, this could be due to several researches explained that chronic

renal disease affected males more than females. This result was agree with the study of **Elzakzouk et al., (2021)** who showed that nearly two thirds of his studied sample was males. However, this result outcome 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 present study result stated that nearly half of the 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 disorder that need 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. Regarding point view of the researchers, 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., (2020)**

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 consistent 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 actual study result illustrated that nearly two thirds of the studied children reported not having any family member suffering from chronic renal failure. Concerning point view of the researchers, 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 present 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. Accordingly 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

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

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 current study results approved that nearly two thirds of the studied pediatric patients, had moderate level of depression, anxiety and stress. Regarding 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 depression, anxiety 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 present 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 negatively impact 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 the procedure of hemodialysis involves numerous difficulties for influenced children, because neither counseling nor training are 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 result was 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 total level of depression, anxiety and stress scale and socio-demographic characteristics among studied pediatric patients as age, sex, number of family members and number of brothers and sister. Concerning 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 total self- esteem, age and education level of studied pediatric patients. 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 total quality of life and socio- demographic characteristics of the studied pediatric patients with chronic renal failure. 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

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

accept themselves and attempting to carry out daily living tasks as much as feasible.

Regarding relationship between total depression, anxiety and stress and clinical data of the studied pediatric patients with chronic renal failure. 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 total level of depression, anxiety and stress and clinical data 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 Deasty, (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 the total self – esteem and clinical data of the studied pediatric patients with chronic renal failure and. The current study result clarified that there was a statistically significant relation between 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 total quality of life and clinical data of the studied pediatric patients with chronic renal failure. The present study result revealed that there is a statistically significant relation between 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:

Less than two thirds of the pediatric patients with chronic renal failure undergoing hemodialysis had moderate levels of psychological problems (stress, anxiety, and depression), and more than half had low levels of self-esteem and quality of life. These findings indicate a strong correlation between psychological problems, self-esteem, and quality of life. Additionally, total psychological problems ,self-esteem and quality of life scores showed a very statistically significant negative link, whereas 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. All children with chronic renal failure should receive a psycho-educational program as important part of their comprehensive care to reduce their psychological problems while improving their self-esteem and quality of life

2. To increase knowledge and promote the bio psychosocial approach to the illness and affected children, a counseling program should be established for the unit's staff.

3. Using non-pharmacological alternative therapies to improve children's ways of coping for their disease, such as reflexology, massage therapy, music therapy, muscle relaxation, and meditation

Further research:

Performed the study on a bigger sample in various correlational setting to generalize the finding .

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

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العلاقة بين المشاكل النفسية والثقة بالنفس وجودة الحياه لدى الأطفال المصابين بالفشل الكلوى

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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 والتي بدورها تنعكس سلبا على الثقة بالنفس ومن ثم جودة الحياه لديهم. وهدفت هذه الدراسه إلى تقييم العلاقة بين المشاكل النفسيه والثقة 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 بمدينة بنها بمحافظة 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 إستماره 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 الثقة بالنفس وجودة الحياه. كما أستنتج من هذه الدراسه وجود علاقته ارتباطيه سلبيه ذات دلالة إحصائيه قويه بين المشاكل النفسيه والثقة بالنفس وجودة الحياه لدى الاطفال الخاضعين للدراسه كما توجد أيضا علاقته ارتباطيه إيجابيه ذات دلالة إحصائيه قويه بين الثقة بالنفس وجودة الحياه لديهم. حيث أوصت هذه الدراسه بضرورة تطبيق برنامج تعليمى نفسى كجزء أساسى وحيوى من الرعاية الترميضية المقدمه لهؤلاء الأطفال للحد من المشاكل النفسيه ومن ثم تحسين الثقة بالنفس وجودة الحياه لديهم.