



بسم الله الرحمن الرحيم

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# **Factors Affecting Coping Mechanism Among Patients Undergoing Hemodialysis Life Long Program**

Thesis

Submitted for Partial Fulfillment of the Requirement of  
Master Degree in Nursing Science  
(Critical Care Nursing)

By

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2022**

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## **List of Contents**

<i><b>Title</b></i>	<i><b>Page No.</b></i>
<b>List of Tables .....</b>	<b>i</b>
<b>List of Figures.....</b>	<b>iii</b>
<b>List of Abbreviations .....</b>	<b>iv</b>
<b>List of Appendices.....</b>	<b>v</b>
<b>Abstract .....</b>	<b>vi</b>
<b>Introduction.....</b>	<b>1</b>
<b>Aim of the Study.....</b>	<b>5</b>
<b>Review of literature.....</b>	<b>6</b>
<b>Subjects and Methods .....</b>	<b>62</b>
<b>Results.....</b>	<b>76</b>
<b>Discussion .....</b>	<b>117</b>
<b>Conclusion.....</b>	<b>152</b>
<b>Recommendations .....</b>	<b>153</b>
<b>Summary .....</b>	<b>155</b>
<b>References.....</b>	<b>165</b>
<b>Appendices .....</b>	
<b>Protocol.....</b>	
<b>Arabic Summary .....</b>	

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## List of Tables

<b>Table No.</b>	<b>Title</b>	<b>Page No.</b>
<b>Table (1.a):</b>	Percentage distribution of socio-demographic characteristics of the studied patients (n=70).....	77
<b>Table (1.b):</b>	Percentage distribution of socio-demographic characteristics of the studied patients (n=70).....	79
<b>Table (2.a):</b>	Percentage distribution of the past medical and family history of the studied patients (n=70) .....	81
<b>Table (2.b):</b>	Percentage distribution of the current medical history of the studied patients (n=70). .....	83
<b>Table (3.a):</b>	Patient 's total knowledge regarding dialysis and renal failure of the studied patients (n=70). .....	87
<b>Table (3.b):</b>	Patients' total knowledge regarding complications of dialysis and diagnostic investigations of renal failure (n=70). .....	89
<b>Table (3.c):</b>	Patients' total knowledge regarding exercising sports and regular investigations (n=70). .....	90
<b>Table (3.d):</b>	Patients'total knowledge regarding smoking and sexual abilities (n=70). .....	91
<b>Table (4):</b>	Percentage distribution of the studied patients' total level of knowledge (n=70). .....	92
<b>Table (5):</b>	Percentage distribution of the social factors affecting patients' coping with hemodialysis life long program (n=70). .....	93
<b>Table (6):</b>	Percentage distribution of the economic factors affecting patients' coping with hemodialysis life long program (n=70). .....	95
<b>Table (7):</b>	Percentage distribution of the psychological factors affecting patients' coping with hemodialysis life long program (n=70). .....	96

<b>Table (8):</b> Percentage distribution of the disease and therapy related factors affecting patients' coping with hemodialysis life long program (n=70).....	98
<b>Table (9):</b> Percentage distribution of health care system and providers related Factors affecting patients' coping with hemodialysis life long program (n=70).....	100
<b>Table (10):</b> Percentage distribution of patients' level of social coping with hemodialysis life long program (n=70).....	102
<b>Table (11):</b> Percentage distribution of patients' level of psychological coping with hemodialysis patients life long program (n=70). ....	104
<b>Table (12):</b> Percentage distribution of patients' level of religious coping with hemodialysis patients life long program (n=70). ....	105
<b>Table (13):</b> Percentage distribution of patients' level of emotional and cognitive coping with hemodialysis patients life long program (n=70). ....	106
<b>Table (14):</b> Percentage distribution of patients' level of behavioral coping with hemodialysis patients life long program (n=70). ....	108
<b>Table (15):</b> Percentage distribution of patients' level of therapeutic coping with hemodialysis life long program (n=70).....	109
<b>Table (16):</b> The relation between patients' socio-demographic characteristics and their total level of knowledge (n=70). ....	112
<b>Table (17):</b> The relation between patients' socio-demographic characteristics and their level of coping (n=70).....	114
<b>Table (18):</b> Correlation between patients' total level of knowledge and their level of coping (n=70) .....	116

## **List of Figures**

<b>Figure No.</b>	<b>Title</b>	<b>Page No.</b>
-------------------	--------------	-----------------

### **Figures in Literature Review**

<b>Figure (1):</b>	Multisystem effects of ESRD.....	14
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<b>Figure (2):</b>	Osmosis and diffusion across semi-permeable membrane .....	22
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<b>Figure (3):</b>	Component of hemodialysis system.....	23
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### **Figures in Results**

<b>Figure (1):</b>	Percentage distribution of patients' total level of coping (n=70) .....	111
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## List of Abbreviations

<i>Abbr.</i>	<i>Full-term</i>
<i>ARF</i> .....	<i>: Acute Renal Failure</i>
<i>ATN</i> .....	<i>: Acute Tubular Necrosis</i>
<i>AVF</i> .....	<i>: Arteriovenous Fistula</i>
<i>AVG</i> .....	<i>:Arteriovenous Graft</i>
<i>BUN</i> .....	<i>: Blood Urea Nitrogen</i>
<i>CAPD</i> .....	<i>: Continues Ambulatory Peritoneal Dialysis</i>
<i>CDC</i> .....	<i>:Centers for Disease Control and Prevention</i>
<i>CKD</i> .....	<i>:Chronic Kidney Disease</i>
<i>CRF</i> .....	<i>: Chronic Renal Failure</i>
<i>ESNT</i> .....	<i>: Egyptian Society of Nephrology and Transplantation</i>
<i>ESRD</i> .....	<i>: End Stage Renal Disease</i>
<i>GIT</i> .....	<i>: Gastrointestinal Ttract</i>
<i>HBV</i> .....	<i>: Hepatitis B Virus</i>
<i>HCV</i> .....	<i>: Hepatitis C Virus</i>
<i>HD</i> .....	<i>: Hemodialysis</i>
<i>HRQOL</i> .....	<i>:Health- Related Quality of Life</i>
<i>PD</i> .....	<i>: Peritoneal Dialysis</i>
<i>PPE</i> .....	<i>: Personal Protective Equipment</i>
<i>QOL</i> .....	<i>: Quality of Life</i>
<i>RRT</i> .....	<i>: Renal Replacement Therapy</i>
<i>SD</i> .....	<i>: Standard Deviation</i>
<i>SPSS</i> .....	<i>: Statistical Program for Social Science</i>
<i>UF</i> .....	<i>: Ultrafiltration Rate</i>
<i>USA</i> .....	<i>: United States of America</i>
<i>WHO</i> .....	<i>: World Health Organization</i>

## **List of Appendices**

- Appendix I:** Patients' interviewing questionnaire .....
- Appendix II:** Assessment of factors affecting coping mechanism among patients undergoing hemodialysis life long program. ....
- Appendix III:** Assessment of patients' level of coping regarding hemodialysis patients life long program. ....
- Appendix IV:** Tools validity and reliability .....

## **Factors affecting coping mechanism among patients undergoing hemodialysis life long program**

### **Abstract**

**Background:** Chronic kidney disease occurs due to impaired kidney function that are progressive and settled. One of the treatment is hemodialysis that performed in a long period, causing changes in the physical, psychological, social, and the economic of the patient. These changes can affect the patient's coping mechanisms. **Aim:** The aim of this study was to assess factors affecting coping mechanism among patients undergoing hemodialysis life long program. **Design:** A descriptive exploratory design was utilized in carrying out this study. **Setting:** The study was conducted at the hemodialysis unit in Ain shams university hospital, which affiliated to Ain shams university. **Subjects:** A purposive sample of 70 adult patients at ESRD undergoing hemodialysis life long program constituted the study sample. **Tools:** One tool was used for data collection: **I-** Patients' interviewing questionnaire it was includes three parts , sociodemographic characteristics, patient medical record and patients knowledge assessment. **II-**Assessment of factors affecting coping mechanism among patients undergoing hemodialysis life long program. **III-**Assessment of patients'level of coping regarding hemodialysis patients life long program. **Results:** The present study revealed that **52.9%** of the studied patients had unsatisfactory level of knowledge about the disease, **92.9%** had negative coping with disease. There was statistically significant correlation between patients' total level of knowledge and their level of coping with their disease. **Conclusion:** More than half of the studied patients had unsatisfactory knowledge regarding to disease, the majority of the studied patients had a negative coping with the disease. Moreover, there is a statistically significant correlation between patients' total level of knowledge and their level of coping with their disease. **Recommendation:** The study recommended developing health education program for hemodialysis patients about factors affecting coping mechanism related to hemodialysis treatment and coping strategies with these factors, in order to encourage patients to cope effectively in daily life.

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**Keywords:** Coping mechanism, Undergoing hemodialysis, life long program

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## **Introduction**

Renal failure is a life-threatening condition in which there is a buildup of waste and fluid in the body due to severe deterioration of kidney function. Renal failure is loss of some but not all of the filtration capacity of both kidneys, which can result from falling in blood pressure, urinary tract abnormalities, an obstruction of the blood circulation to the kidneys, urine outflow blockage and renal diseases. It may occur as an acute or chronic condition (**Gilbert & Weiner, 2022**).

Hemodialysis is the most common method used to treat advanced and permanent kidney failure and other toxic conditions. Hemodialysis (HD) defined as a life saving procedure that uses a special machine to filter waste products from the blood and to restore normal constituents to it. HD is done 3 times a week and each session lasts from 3 to 4 hours. HD extends life and permits the expression of much progressive multisystem disease (**Naderifar et al., 2019**).

Patients undergoing hemodialysis life long program can experience different levels of physical and psychological factors that affect on patients coping. Those factors can be related to financial problems, difficulty in holding a job, depression from being chronically ill and fear of dying. In this regard, hemodialysis patients are still subjected to multiple threats and factors that may worsen their

health-related coping with life. These factors include physical dependence on devices, limitations in mobility, fluid restriction, taking large doses of medication, loss of appetite and energy and changes in sexual function. Psychosocial factors affecting patients for coping include loss of independence, not having enough time to perform dialysis, loss of job, changes in self-perception and fear of death. In addition, patients on hemodialysis can experience physiological factors that include fatigue, reduced physical function, hypotension, muscle cramps, nausea, and vomiting. Moreover, the most frequently reported psychological concerns are unemployment, changes in body appearance, increased time on hemodialysis machine, disturbance in the sleeping pattern, and changes in the daily living activities as well as lifestyle (**Zambrano et al., 2022**).

Coping is an active process in which the use of the resources of the individual and develop new behaviors that aims to cultivate the power of the individual, reducing the impact. Renal failure patients who have good coping mechanisms will show hope of improvement a healthy condition and able to adapt the changes in physical, psychological, and social environment as a result of kidney failure that he suffered. (**Ghaffar et al., 2019**)

Hemodialysis requires specialized nursing care, including establishment of a therapeutic and interpersonal relationship, treatment of physical symptoms, and attention to the functional limitations, mental disorders, and educational needs of these patients. Basically, nurses are the main people who provide care for these patients, and their most important responsibility is to identify the essential care of these patients. Nurses' awareness of high quality of care can affect the care of these patients and increase patients' satisfaction; notably, the quality of the provided nursing care is an important indicator of nurses' involvement in the care program (Shahdadi & Rahnema, 2018).

### **Significance of the study:**

Chronic kidney disease (CKD) is an important contributor to morbidity and mortality from non-communicable diseases. Chronic kidney disease (CKD) has been recognized as a leading public health problem worldwide. The global estimated prevalence of CKD is 13.4% (11.7-15.1%), and patients with end-stage renal disease (ESRD) needing renal replacement therapy is estimated between 4.902 and 7.083 million (Lv & Zhang, 2019).

According to 9th Annual Report of The Egyptian Renal Registry provided by Egyptian Society of Nephrology and Transplantation (ESNT), prevalence of ESRD in Egypt raised to 483

patients per million. Males represented 55.2 % while females were about 44.8 %. Only about 4 % of patients are HBV positive while HCV positive patients are about 52.1% (**El-Ballat, El-Sayed, & Emam, 2019**) ,so that identifying factors affecting coping mechanism among patients undergoing hemodialysis is the important step on making adaptation and solving the problem affect on patients on hemodialysis.