

Factors Affecting Quality of Life among Patients Undergoing Hemodialysis Program

Thesis

Submitted for partial fulfillment of Master Degree
in Medical Surgical Nursing

Prepared by

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قالوا

لَسْبَدَانِكَ لَا نَعْلَمُ لَنَا
إِلَّا مَا عَلَّمْتَنَا إِنَّكَ أَنْتَ
الْعَلِيمُ الْعَظِيمُ

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 **Researcher**

Sae'd Abu Elkass

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List of Abbreviations

<i>Abbr.</i>	<i>Full-term</i>
ACE	: Angiotensin-converting Enzyme
AVF	: Arteriovenous Fistula
AVG	: Arteriovenous Graft
BUN	: Blood Urea Nitrogen
CDC	: Center For Disease Control and prevention
CKD	: Chronic kidney disease
CNS	: Central Nervous System
CAPD	: Continuous Ambulatory Peritoneal Dialysis
CRF	: Chronic Renal Failure
ESRD	: End Stage Renal Disease
GFR	: Glomerular Filtration Rate
GIT	: Gastrointestinal tract
HBV	: Hepatitis B Virus
HCV	: Hepatitis C Virus
HD	: Hemodialysis
HDL	: High Density Lipoprotein
HIV	: Human Immunodeficiency Virus
LC	: Liver Cirrhosis
MOH	: Ministry of Health
MCS	: Mental Component Summary

NKFKDOQI	: National Kidney Foundation Kidney disease Outcomes Quality initiative
NKUDIC	: National Kidney and Urologic Diseases Information Clearinghouse
KDQoL	: Kidney Disease Quality of Life
PCS	: Physical Component Summary
PTH	: Parathyroid Hormone
QoL	: Quality of Life
RF	: Renal Failure
SF-36	: 36 item short form health survey
SPSS	: Statistical Package for the Social Sciences
USRDS	: United States Renal Data System
WBC	: White blood cells
WHO	: World Health Organization

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Abstract

Introduction: Hemodialysis (HD) is one of the treatment modalities for end stage renal disease patients (ESRD). ESRD and dialysis affects the daily lives of many patients and families confronted by changes in health status, lifestyles, and roles, leading to impaired QoL. **Aim of the study:** to identify the factors affecting QoL among patient undergoing HD it is through assessing the effect of QoL dimensions (physical, psychological, social and spiritual) on patients undergoing HD. **Research design:** A descriptive design. **Subjects:** A purposive sample of 93 adult male and female patients undergoing HD. **Setting:** The study was conducted at renal insufficiency and dialysis unit at El-Shifa hospital in Gaza Strip. **Tools** of the study involved Structure interviewing questionnaire and kidney disease quality of life short form (KDQoL- SF™) version 1.3. (1997). **Results:** Finding of this study indicated that, QoL of patients undergoing HD was significantly impaired, numerous clinical and demographic factors were found to have a statistically significance difference with QoL dimensions, such as gender, occupation, income, but the most powerful predictors of impaired QoL are physical and psychosocial factors. **Conclusion:**The result of this study concluded that the factors affecting QoL for those patients were age, sex, occupations, marital status, type of work, socioeconomic status, residence and educational level. The highly affected dimentions of satisfaction are the spiritual; and overall health dimension, while the least affected dimentions of satisfaction are the physical and psychosocial quality of life. **Recommendations:** Apply this research on a larger number of patients, to identify and evaluate more other factors not analyzed in this study which may affecting QoL for patients with ESRD such as: coping behaviors, quality of care received. Compartive study between quality of life among patients undergoing hemodialysis in Egypt and Palestine.

Key words: End Stage Renal Disease, quality of life, hemodialysis, physical and psychosocial factors.

Introduction

End stage renal diseases (ESRD) is defined as the loss of renal function characterized by less than 20 percent of the normal glomerular filtration rate (GFR). About two thirds of patients who will eventually reach ESRD, they have progressive renal failure. The early manifestations are nausea, apathy, weakness and fatigue. The progress in uremic complications occurs late and are frequent vomiting, restlessness and convulsion, pale and dry skin, as well as Kussmaul pattern respiration, with deep coma. The ESRD requires dialysis, either peritoneal dialysis or hemodialysis (*Mahan & Raymond, 2012*). There are certain uremia-associated risk factors that are unique in this population, which include anemia, hyperparathyroidism, dyslipidaemia, high lipoprotein, prothrombotic factors, hyperhomocysteinemia, oxidative stress, hypoalbuminemia, chronic inflammation, divalent ion abnormalities (*Cianci, Lai, Fuiano, Gigante, Martina, Barbano, Donate, Clemenzia, Presta, Gliotti, Andreucci, Caglioti, & Fuiano, 2009*).

Hemodialysis (HD) is a medical treatment in which the blood is removed from the body and run through a filter to remove waste products before being returned to the body. This treatment is commonly used to treat people who are experiencing kidney failure, as normally the kidneys perform this function. Depending on the patient and the situation,

hemodialysis may be performed on an emergency or long-term basis (*Poch, 2012*).

Quality of life is also defined as the degree to which a person enjoys the important possibilities of his or her life. Possibilities result from opportunities and limitations each person has in his\her life and reflect the interaction of personal and environmental factors. Enjoyment has two components: the experience of satisfaction or the possession or achievement of some characteristics (*Health Affairs Organization, 2011*).

Quality of life is divided into three domains which includes; being, belonging, and becoming. Being relates to one who is physical, psychological and spiritual being. Physical is concerned with physical health, personal hygiene, nutrition, exercise, grooming and clothing, and general physical appearance. Psychological being concerns with psychological health and adjustment, cognitions, feeling, self-esteem, self-concept and self-control. Spiritual being includes personal values, personal standards of conduct, and spiritual beliefs (*Strine, Chapman, Balluz, Moriarty, & Mokdad, 2008*).

The assessment of QoL in chronic diseases is becoming more and more important. In the field of nephrology, the evaluation of QoL involves determining the efficiency and effectiveness of the different forms of renal replacement therapy,

evaluating the efficiency and effectiveness of types of other treatments applied to patients with ESRD (e.g., Recombinant human erythropoietin hormone), and follow-up the evolution of individual renal patients. A large number of instruments have been developed for QoL assessment. They vary in the method of administration and classified into generic, disease-specific, and domain-specific instruments (*De Abreu, Walker, Sesso, & Ferraz, 2011*).

QoL is important as an outcome measurement, especially for long-term diseases such as chronic renal failure (CRF), sometimes reducing or limiting the social levels (*Bohlke, Nunes, Marini, Kitamura, Andrade and Von-Gysel, 2008*). Although advances in dialysis treatment have contributed to improved survival of patients with ESRD, QoL is much lower for those patients than for the general population (*Abed El-Hamed et al., 2011*). There are mainly three types of variables which might affect the QoL of dialysis patients: socio-demographic variables (age, gender, socioeconomic status and educational level), clinical variables (co-morbid conditions, and dialysis duration), and psychological variable (patients' representation of illness) (*Mollaoglu, 2013*).