Factors Affecting Self Care for Patients with End Stage Renal Failure

Thesis

Submitted for Partial Fulfillment of the
Requirements of the Master Degree

In
Nursing Science
(Medical-Surgical Nursing)

By
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ABSTRACT

End-stage renal disease (ESRD) is a progressive, debilitating, chronic illness requiring nursing and medical interventions. The self-care includes positive steps taken by individuals to either prevent disease or promote general health status through health promotion or lifestyle modification. The aim of this study was to assess patient's needs of self care activities, and to assess the factors affecting self care for patients with ESRD. To conduct this study a sample of convenience of one hundred adult patients with ESRD undergoing hemodialysis were recruited from Hemodialysis Units in Ain Shams University Hospital. Tool of data collection was an interview questionnaire sheet. The results of the study revealed that most of patients (89%) were unsatisfactory with self-care toward vascular access care, diet and medication compliance, while almost one tenth (11%) were satisfactory. As well, (87%) of patients had low level of knowledge about their disease. This study recommended that self-care behaviors of dialyzed patients should be evaluated at regular intervals using validated scales.

Key words: End stage renal disease, self-care.

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Naglaa Talaat

List of Abbreviation

ARF	Acute Renal Failure
AVF	Arteriovenous Fistula
AVG	Arteriovenous Graft
BUN	Blood Urea Nitrogen
CKD	Chronic Kidney Disease
CRF	Chronic Renal Failure
CVD	Cardiovascular disease
DSCRs	Developmental Self Care Requisites
EPO	Erythropoietin
ESRD	End Stage Renal Disease
GFR	Glomerular Filtration Rate
HD	Hemodialysis
MI	Myocardial infarction
HDSCRs	Health Deviation Self Care Requisites
HS	Highly Significant
NS	Non-Significant
PD	Peritoneal Dialysis
S	Significant
SCRs	Self Care Requisites
USCRs	Universal Self Care Requisites
VHS	Very Highly Significant

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INTRODUCTION

End-stage renal disease (ESRD), sometimes called kidney failure, occurs when kidney damage becomes so severe that the organs function at less than 10 percent of normal capacity. When this happens, the kidneys are almost completely unable to help the body excrete waste and regulate bodily fluids. People with ESRD must undergo lifesaving dialysis, in which a machine performs many of the normal functions of the kidneys **(Kohnle, 2006)**.

Epidemiologic studies have shown that the incidence of kidney diseases is higher in the developing countries than in the industrialized world**.** Patients with end stage renal disease are growing worldwide. About 20%-30% patients have some degree of renal dysfunction who need renal replacement treatment **(*Remuzzi*, 2001)**.

In Egypt, had a population of approximately 68 million in 2001. The estimated number of patients on dialysis in Egypt in year 2001was 25,518. In Egypt, most of patients (99.9%) with ESRD are treated by hemodialysis, while only 0.1% is treated by peritoneal dialysis. In 2004, it was 33000, while it became 39600

patients at the end of 2006. In Egypt, each year over 117 patients per million on hemodialysis die, and this is considered a national problem, because it has several effects on the patients such as economic, social and psychological aspects **(Afifi, 2003; Afifi & Karim, 2006)**.

According to Orem, self-care is employed using learned, reasoned judgments to maintain life, health, continuing personal development, and well-being. Individual human beings have power to bring about beneficial conditions in their environment to meet their known self-care requirements for functional and developmental regulations **(Tomey & Alligood, 2006).**

Self care has been defined as range of activates associated with health promotion that individuals can do for themselves when they have reached maturity that is enabling for consistent, controlled, effective and purposeful action to maintain health . Activities of daily living such as exercise, nutrition, relaxation, walking, bathing and shopping are often used to measure self care **(Stanhope & Lancaster, 2004).**

Hood and Leddy (2003) identified that, the individual's ability to engage in self-care is affected by the basic conditioning factors. These factors are age, gender, developmental state ,health status, socio-cultural orientation, health care system factors i.e., diagnostic and treatment modalities , family system factors , pattern of living, environmental factors, and resources availability and adequacy.

Nurses are in key position to teach patients about self-care since nurses are the health care providers who have continuous contact with patients and families and are usually the most accessible source of information for the patients **(Gaynor & Patyk, 2004).**

The nurse in hemodialysis unit should be a professional nurse, should have special orientation that involves the learning of new concepts, ideas, behaviors and skills. The vital role is to get the confidence of their patients to influence, guide and help them to cope with their complications and stresses of their newly imposed limitations, such conditions might give rise to physical and psychological disturbances. The nurse should understand and help patients to cope with reality by adjusting expectations and

therefore minimizing disappointment and complications from their disease. **(Alleman, 2006)**

Significance of the study

This study has been conducted to assess factors affecting self care in patients undergoing regular hemodialysis through using questionnaire, it is essential for patients with hemodialysis to comply with the treatment to prevent complications and to improve quality of life. Chronic renal failure and its treatment can severely compromise quality of life of people affected by the disease. Self care is an integral part to ensure a good quality of life; this requires considerable time and energy.

The patients whom trained for self care will have higher social function, and emotional well-being.Self-care is very important for patients with hemodialysis to produce better clinical results, including better control of interdialytic weight gain, decreased levels of depression, and improved ability to control their ESRD **(Ricard, 2006).**

Self-care advocates patients being partners in their treatment, having the knowledge and skills to care for themselves, making decisions about their care, identifying problems, setting goals, monitoring and managing symptoms.

## Aim of study

The study aims to:

1-Assess patient's needs of self care activities.

2-Assess the factors affecting self care for patients with end stage renal failure.

Research questions:-

1- What are the patient's needs of self-care activities?

2- What are the factors affecting self care for patients with end stage renal failure?

Anatomy and Physiology

The organs of urinary system are the paired kidneys, the paired ureters, the urinary bladder, and the urethra. Each structure is essential to the total functioning of urinary system. The two kidneys are located outside the peritoneal cavity and on either side of the vertebral column at the levels of T_{12} through L_3. These highly vascular, bean-shaped organs are approximately 4.5 inches (11.4 cm) long and 2.5 inches (6.4 cm) wide. Internally, each kidney has three distinct regions: the cortex, medulla and pelvis. The outer region, or renal cortex, is light in color and has a granular appearance. This region of the kidney contains the glomeruli, small clusters of capillaries. The glomeruli bring blood and carry waste products from the nephrons, the functional units of the kidney **(LeMone & Burke, 2008).**
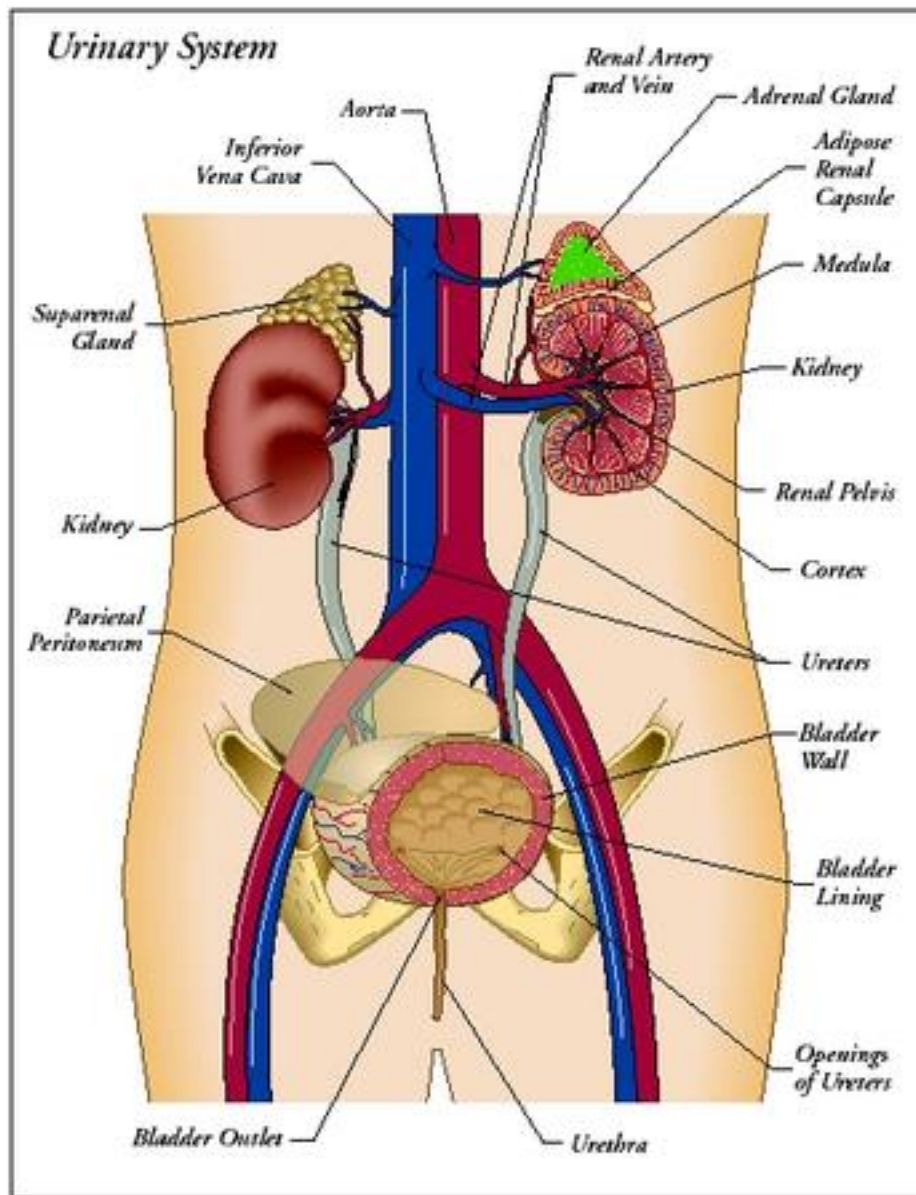
Anatomy of the upper and lower urinary tract system adapted from **Smeltzer et al. (2008).**