

INTRODUCTION

Home care is a provide care to promote, maintain, or restore a patient's health and reduce the effects of disease or disability (*Rice, 2001*).

Self-care is a control of one's own care. For the purposes of health, it is about the person being able to decide how and what action needed to be taken and by whom, in order to sustain their care/treatment .Self-care is about the choice a person makes and actions they taken to maintain health and well being (*Department of Health, 2003; Linda &Barbara, 2009*).

Self-care can be given in a number of ways, by the patients and their families, friends, formal and informal care and relation to community groups. Self-care is the individual being activity involved in finding effective ways to deal with their identified problems and enable them to achieve their goals (*Linda & Barbara, 2009*).

Renal failure (RF) is a condition in which the kidneys are unable to remove accumulated metabolites from the blood, leading to altered fluid, electrolyte, and acid base balance. Renal failure can be acute or chronic. Acute renal failure (ARF) has an abrupt onset and with prompt intervention is often reversible, while chronic renal failure (CRF) is a silent disease, developing slowly and insidiously, with few symptoms until the kidneys are severely damaged and unable to meet the excretory needs of the body (*Lemone & Burke, 2004*).

Dialysis is an artificial means of removing waste products and extra fluid from the blood (*Levey, 2004*).And (*Thomas, 2008*). There are two methods of dialysis which include hemodialysis, Continuous Renal Replacement the Therapy (CRRT), and various forms of peritoneal

dialysis. The need for dialysis may be in acute or chronic conditions (*Hagen, 2004*).

Hemodialysis is a process used for patients who are acutely ill and require short-term dialysis (days to weeks) or for patients with end stage renal disease who require long term therapy. It is a removal of waste products during a limited period of time 3-4 hours, during which usually 2-4 liters of fluid overload is removed, (*Smeltzer & Bare, 2004*).

The persons with RF also suffer from the effects of hemodialysis although their life is saved with these treatments. Receiving hemodialysis treatment affects patients' physical, psychosocial, and economic status. As for physical effects, for example, muscle cramp may occur during hemodialysis, especially the one related to intracellular movement of water and sodium lost in dialysate from rapidly removing fluid by ultrafiltration ((*Levey et al., 2004*). Fatigue also interferes with the ability to maintain activities of daily living, and limitation of social activities due to hemodialysis schedule further troubles the patients (*Lemone & Burke, 2008*). In addition, technology dependency affects role function. For example, a husband who is the breadwinner or a wife who is the housekeeper may have to change or reverse their role leading to conflicts and stress in their families (*Lowrie et al., 2003*).

The application of hemodialysis for patients with End Stage Renal Disease (ESRD) is usually associated with complications, which arise during long-term hemodialysis as anemia, bone disease and peripheral neuropathy. There are also complications encountered during hemodialysis setting as; hypotension, chest pain, dyspnea, nausea and vomiting and bleeding; also vascular complications as inflammation and occlusion of fistula (*Lewis et al., 2000; Maya & Allon, 2008*).

Hemodialysis patients require special self-care because of characteristics of the long-term nature of illness and its treatment which tends to be complex and multidimensional. Chronically ill persons need to incorporate the appropriate health/illness behaviors into their daily lives (*Verreli, 2004*). Hemodialysis patients also have special characteristics and complex treatment. Specific self-care of patients with ESRD undergoing hemodialysis therapy includes restricting fluid, taking medications and special food, monitoring sign of fluid overload and complications, as well as changing their lifestyles.

According to patients with chronic renal failure undergoing hemodialysis performed self-care to maintain their lives with chronic illness, so the theory of self care (*Orem, 1999*) was used as a conceptual framework. Since Orem's theory of self-care was a broaden theory and did not specific to any population.

Patients need to be aware of appropriate diet modifications, steps to preserve access function, signs and symptoms of infection, appropriate fluid volume allowed daily, and signs to report to the nephrology healthcare team (*Roberta et al., 2006*).

Nurses should understand quality of life perceived by patients undergoing hemodialysis because it doesn't mean the same thing to everyone at the same time. The rich information collected can help nurses to determine which patients may be at risk for decreased quality of life.

Nurses can direct resources to areas where improvement may be required. (*Suet-ching, 2001*). Nurses have to identify and explore the patients' information about disease and treatment regimen, their needs in order to help them to maintain an effective self care practices and to reach maximum level of quality of life. Patients having information about their

disease and treatment, their needs, this information may affect their self care practices, and reducing exposure to hemodialysis complication. Also its effect on being adapted with chronic illness and new treatment modalities which lead to patient adaptation with changes in life style (*Roberta at al., 2006*).

Significance of the study:

Renal failure is not only a clinical concern, but also, a growing economic problem. Recently, ESRD has received increased attention as a public health problem; this is due to the out increasing numbers of patients attending RF therapy (*Farage, 2005; and Abd El-Azeem, 2008*).

In Egypt, most of patients 99.9% with End Stage Renal Disease are treated by hemodialysis, while only 0.1% of patients with ESRD are treated by peritoneal dialysis. The number of patients with ESRD on regular hemodialysis increases by 10% every year. In the year 2004, it was 33000, while it became 39600 patients at the end of year 2006 (*Afifi & Karim, 2006*).

It is obvious that the problem of renal failure is increasing rapidly. Patients with chronic renal failure usually do not require permanent hospitalization, but they are in need to adhere to therapeutic regimen for the rest of their lives.

The estimated number of patients with ESRD in Egypt was about 18.000 at year 2000 and 28.212 at the end of 2003. Estimated prevalence per million of dialysis patients in Egypt was 255 in 1996, while became 264 in 1998, /314 in 2000, /375 in 2001 and 403 in 2003 (*Farage, 2005*). While the estimated annual incidence of ESRD is around 74per million

and the total prevalence of patients on dialysis is 264 per million (*Ahmed et al., 2010*).

The mortality of hemodialysis patients in Egypt is approximately 25-30% annually. Ischemic heart disease and infections are the leading causes of death amongst these patients. There is an apparent increase in the number of patients with chronic renal failure (*Afifi and Karim, 2006*).