

Introduction

Chronic kidney disease (CKD), also known as chronic renal disease, is a progressive loss in renal function over a period of months or years. The symptoms of worsening kidney function are unspecific, and might include feeling generally unwell and experiencing a reduced appetite and can only be detected as an increase in serum creatinine or protein in the urine. people known to be at risk of kidney problems, such as those with high blood pressure or diabetes and those with a blood relative with chronic kidney disease (*National Kidney Foundation, 2008*).

End stage renal disease (ESRD) is a complex disease associated with compromised quality of life (QoL), unplanned hospital admissions, high mortality and therefore high burden of illness (*Griva et al., 2010*). With rising prevalence worldwide, the growth of ESRD populations has been a concern for many countries, as ESRD consumes increasing proportions of healthcare budgets (*Block, 2004 and National Institute on Aging, 2010*). The burden of ESRD will increase with the growth of the ageing population and increased prevalence of diabetes (*National Registry of Diseases Office, 2010*).

End-stage renal disease (ESRD) can be challenging. There are more than 500,000 people with ESRD in the United States, and more than 350,000 are receiving dialysis (*Collins et al., 2009*). Diabetes and hypertension are the two most common causes of CKD. Co morbidities, fluid and electrolyte imbalances, current and future vascular access sites, hemodialysis (HD) schedules, and continuity of care are some of the special issues that should be considered (*McCullough et al., 2007*).

Mortality is high among patients receiving renal replacement therapy with an 8% mortality rate in the first 90 days (**UK Renal Registry, 2010**). Risk factors for mortality include older age, physical and nutritional impairment, smoking, prior myocardial infarction, low serum albumin levels at baseline, catheter access at first dialysis, concomitant cancer, heart failure, depression, lung disease, neurological disease, psychiatric conditions and late referral to a Nephrologist (**Bradbury et al., 2007**).

Hemodialysis is a technological therapeutic procedure used to treat End Stage Renal Disease (ESRD). Despite therapeutic effect of hemodialysis in ESRD, the patient's encounter to different physical and psychological tensional factors that is uncontrollable. Uremic symptoms, non uremic disorders, problems in daily activity and physical function, and other problems that are induced by therapeutic procedure are the major problems in hemodialysis patients (**collins et al., 2009**).

Hemodialysis patients encounter different tensional factors such as family problems, sexual dysfunction, dependency to others in continuing life, social seclusion, changes in body image concept, psychological tensions and threaten to death. Physical problems such as exhaustion, sleep disorders, and sexual dysfunction are the most important ones in hemodialysis patients. Many studies have showed that hemodialysis patients encounter many complications such as hypertension, loss of appetite, anemia, disturbance of concentration, kidney osteodystrophy, abnormal menstruation, skin disorder such as itching, infection of fistula, and skeletal and muscle pain. Finally physical problems and psychological disorder in these patients are reported to be 22.4% to 51.6%. (**Mehdi Heidarzadeh et al., 2010**).

Hemodialysis requires radical lifestyle changes including regular attendance at the dialysis unit for treatment, restrictions in fluid intake, changes to diet and medication intake. Estimates within the hemodialysis population suggest that the prevalence of non-adherence is 60 % for fluid intake, 57 % for dietary advice, 35 % skip or shorten dialysis sessions and 99 % are non-adherent to their medications (*Denhaerynck et al., 2007*). This is likely to be associated with psychosocial variables such as patients' beliefs, social support and personality characteristics rather than clinical or socio-demographic variables (*Karamanidou et al., 2008*).

Self management interventions offer an effective tool to support adjustments to the lifestyle changes required in hemodialysis. For self management to be effective, it needs to encompass the patient's ability to monitor their condition and to affect the cognitive, behavioural and emotional responses are necessary to maintain a satisfactory QoL. There are (5) cores for self management skills; problem solving, decision making, resource utilization, forming of a patient/health care provider partnership and taking action (*Curtin et al., 2008*).

Although there is evidence to suggest both clinical and psychological benefits resulting from self management interventions in chronic conditions such as arthritis, diabetes and recurrent lower urinary tract infections, there is comparatively less work on the value of self management programs in renal disease (*Konstadina et al., 2011*). Also, (*Weng et al., 2010*) reported that patient who perceived self efficacy is more constant correlate of the performance of self management behaviours than clinical and demographic variables. In addition, engagement in self management behaviours has been associated with improved QoL.

Nephrology nurses play an integral role in the coordination, monitoring, counseling and education of patients' undertaking for self managed dialysis therapies. In providing instruction for self managed dialysis therapies, nephrology nurses apply principles of learning and educational theory that age and developmentally appropriate are in order to provide effective programs (*Harwood and Leitch, 2006*). Nephrology nurses assist patients across the continuum of kidney disease to develop skills and strategies to recognize and manage symptoms associated with disease, complex diet, and medication plans, vascular access, as well as competencies required to self-manage peritoneal dialysis and hemodialysis (*Wingard, 2008*).

Significance of the study

End Stage Renal Disease (ESRD), a chronic condition requires complex, technically knowledge and expensive care. It is a public health problem that is over-represented in minority, low-income, and elderly populations. In (2007), 526,343 clients in the U.S. had ESRD at a cost of \$23.9 billion dollars. At the beginning of (2008), approximately 367,604 clients in the U.S. were on dialysis and most of them (341,264) received hemodialysis (*USRDS, 2009*). The prevalence rate of acute and chronic renal failure was high in the Arab world and in Egypt that is about 225 per million of population (*shaheen & Al-Khader, 2005*).

Epidemiologic data from Canada, the UK, Europe in general, Japan, Taiwan, Egypt, and worldwide continue to depict a growing ESRD population (*Afifi, 2004 and Canadian Institute for Health Information, 2010*). These increases in ESRD populations worldwide are occurring in spite of at least two decades of intensified so-called renoprotection strategies, including attempts at optimal hypertension management, optimization of diabetic control, smoking cessation efforts, and the

extensive application of reninangiotensin- aldosterone system (RAAS) blockade in both diabetic and non-diabetic chronic nephropathies (*Lewis et al., 2011*). So, the current study was conducted to describe important of self management for patients with end stage renal failure and factors affecting on self management to be a step in improving the health for this special group of patients.